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THE SECURITY HOLDINGS OF NATIONAL BANKS

An interesting feature of the national banking system of the United States has been the investment of a considerable part of the funds of the banks in securities other than United States bonds. On June 4, 1913, the net holdings of such securities by the 7,473 national banks of the United States was \$1,050,970,119—the largest absolute amount, and the largest proportion relative to total banking assets held at a corresponding season in the history of the national banking system.

The net amount of such investments—corresponding to “security holdings” as employed in the present paper—is obtained by adding to the amount of “bonds, securities, etc.” as reported to the Comptroller of the Currency, the amount of “other [than United States] bonds to secure United States deposits,” and deducting from this total the amount of “bonds borrowed.” Omission is made of all United States bonds, whether held to secure circulation, to secure deposits, or ‘on hand’—for the reason that other than investment considerations may be regarded as having induced such purchases. On the other hand, the occasional temporary use of other than United States bonds to secure public deposits does not affect their primary significance as investment securities, and they are therefore included. Deduction of “bonds borrowed” first becomes possible in November, 1902, prior to which no report specifically covering such transactions was required. The foregoing method of computation errs on the side of conservatism in that some part of “bonds borrowed” consists of United States bonds, and also in that the banks’ holdings of short-time obligations of railroad, public utility, or other corporations are sometimes reported under the head of “loans and discounts” and not of “bonds, securities, etc.”¹ But as against this, the

¹ As regards existing practice, Acting Comptroller T. P. Kane writes me: “Short time obligations or notes of railroad, public utilities, or other corporations are preferably to be carried under the heading of ‘Loans and discounts,’ but this is not the universal practice, as many banks carry them under the heading of ‘Bonds, securities, etc.’ This office has not made any specific requirement in the premises, leaving it to the banks to determine under which heading to carry them. Unlike a regular bond, however, such notes are held to be subject to the limit of loans.”

banks are required to return under the head of "bonds, securities, etc." their holdings of "stocks, presumably taken for debt," and of "warrants, claims, judgments, etc."

I

The security holdings of the banks, including "bonds borrowed," were distributed, at the latest available date, June 14, 1912, as follows:

	Per cent
State, county, and municipal bonds.....	16.63
Railroad bonds	32.87
Other public service corporation bonds.....	18.13
All other bonds.....	20.73
Stocks (presumably taken for debt).....	3.98
Warrants, claims, judgments, etc.....	3.50
Various securities with the Treasury as security for public deposits.....	2.88
Foreign government bonds.....	.79
Other foreign bonds and securities.....	.40

The only significant variation in relative distribution, since September 1, 1909, when the classification upon which this distribution is based was first reported by the banks and thereafter tabulated for one call in each year in the comptroller's annual report, has been a moderate decline in the proportion of railroad bonds and a corresponding increase in the securities of public service and industrial corporations.

Authority to make investments in bonds, although not expressly conferred, has been held as included in the powers of a national bank to discount and negotiate promissory notes, bills of exchange, and other evidences of debt, and this administrative construction has been confirmed by judicial decision that national banks are authorized to purchase corporate and municipal bonds as such evidences of debt.² Whatever doubt may have remained, in the absence of adjudication by the United States Supreme Court, was *de facto* dispelled in 1908 by the provisions of the Aldrich-Vreeland act looking to the possible acceptance of bonds other than United States bonds as security for additional note circulation.

The motives leading to such investments are in some cases specific and local—as the purchase of the bonds of a particular state or city for tax-exemption purposes, or to serve as the legal or practical requisite for securing public or semi-public deposits. So

² *Newport National Bank v. Board of Education*, 70 S.W. 186 (*Digest of Decisions Relating to National Banks*, Washington, 1912, p. 497).

too the profitable banking account of a private corporation may sometimes be more certainly retained by participation in its financing. But such purchases, as well as the bonds acquired by the taking over of hypothecated securities, explain only a fractional part of the banks' aggregate holdings.³

As familiar banking practice, the purchase and ownership of such securities by the national banks is commonly explained upon the theory of a "secondary reserve."⁴ Sound banking policy, it is held, dictates that cash reserves should be supplemented by income producing investments of indubitable safety and easy marketability—available for quick, favorable conversion into cash, when monetary drain threatens exhaustion of the primary reserve. Thus, Professors E. D. Howard and J. F. Johnson state that "the ready market which is at hand under normal conditions for the bonds [securities, etc. owned by the banks] causes the bank to regard them as a form of secondary reserve which can almost immediately be converted into money in case of emergency."⁵ Professor F. A. Cleveland includes such securities among "those assets which are held as an 'invested-reserve' as a means of obtaining 'cash' to meet extraordinary demands on credit-accounts outstanding."⁶ Mr. Horace White declares: "It is desirable that a bank should have a portion of its interest-bearing assets so invested that it can be quickly turned into cash to meet a sudden emergency. . . . Stock exchange securities are held by banks, partly because they can be sold at short notice to meet such emergencies."⁷ Mr. Victor Morawetz adds that "As long as finan-

³Hollander, *Bank Loans and Stock Exchange Speculation* (Washington, 1911), p. 17. Here and there particular banks have entirely abstained from such investments, and in rarer cases this restraint has become an avowed policy.

⁴The term "secondary reserve" has no precise meaning in national banking law or administration. Mr. Frank A. Vanderlip writes me that in the street use of the phrase, "it is represented by bonds, call loans, and anything that can readily be liquidated in twenty-four hours or so. Commercial paper, which is put in the portfolio, with a definite maturity, such as sixty or ninety days, cannot, of course, be considered a part of the so-called secondary reserve. Abroad where the system of acceptances of commercial paper and the presence of a discount market gives prime acceptances a ready marketability, such paper could be considered a part of this reserve."

⁵*Money and Banking* (New York, 1910), p. 267.

⁶*The Bank and the Treasury* (New York, 1908), p. 114. Professor Cleveland more than any other student of our national banking system has given attention to the effect of security holdings upon banking activities.

⁷*Money and Banking* (Boston, 4th ed., 1912), p. 210. Mr. White, however, criticises severely the "misuse of terms" whereby certain state laws allow a

cial conditions generally are not strained, bonds or other securities that have a ready market may serve as a reserve, because by selling such bonds or securities a bank can obtain money."⁸

In accordance with the theory of a "secondary reserve," the proportion of their resources which the banks might be expected to maintain in the form of such securities should be—apart from seasonal, cyclical, and sectional fluctuations—reasonably constant. As a matter of fact, practically from the establishment of the national banking system to the present time the ratio of security holdings to banking resources has increased. Occasionally, there has been decline; but thereafter the tendency has been resumed and a higher ratio attained. The ratio of securities to total resources has been, for each year since 1863, as follows:

TABLE 1.—Ratio of securities to total resources.

Year	Averaged calls	Autumn call	Year	Averaged calls	Autumn call
	<i>Per cent</i>	<i>Per cent</i>		<i>Per cent</i>	<i>Per cent</i>
1863	.59	.59	1888	3.54	3.54
1864	.32	.47	1889	3.64	3.64
1865	.91	1.39	1890	3.81	3.67
1866	1.16	1.03	1891	3.91	3.89
1867	1.30	1.43	1892	4.25	4.40
1868	1.29	1.32	1893	4.63	4.77
1869	1.35	1.48	1894	5.50	5.56
1870	1.43	1.56	1895	5.68	5.69
1871	1.36	1.41	1896	5.69	5.78
1872	1.28	1.33	1897	5.72	5.63
1873	1.27	1.29	1898	6.11	6.37
1874	1.43	1.48	1899	6.67	6.88
1875	1.64	1.78	1900	7.08	7.27
1876	1.75	1.88	1901	7.61	7.87
1877	1.87	1.97	1902	8.03	8.06
1878	2.04	2.08	1903	7.90	7.94
1879	1.95	2.11	1904	7.99	8.12
1880	2.16	2.31	1905	8.40	8.49
1881	2.47	2.62	1906	8.13	8.14
1882	2.81	2.75	1907	8.32	8.44
1883	2.93	2.99	1908	8.95	8.97
1884	3.11	3.12	1909	9.10	9.22
1885	3.18	3.18	1910	8.38	8.45
1886	3.28	3.25	1911	9.24	9.59
1887	3.37	3.38	1912	9.45	9.43

portion of the reserves of state banks to consist of the bonds of the state itself, or of the United States "since a bank reserve signifies something which can be immediately used to pay the demand obligations of the bank" (*ibid.*, p. 366). Particulars as to such provisions in state banking systems are conveniently found in Professor George E. Barnett's *State Banks and Trust Companies since the Passage of the National Bank Act* (Washington, 1911), p. 115.

⁸ *Banking and Currency Problem in the United States* (New York, 1909), pp. 18-19.

The annual increase in the ratio of securities, as indicated by the percentage of securities to total resources, averaged at successive calls in each year, has been interrupted but seven times in the history of the national banking system. Of these, three (1863-64, 1867-68, 1870-1873) may be neglected as pertaining to the period before 1873. The 1902-03 arrest is apparent rather than real, being due to the inclusion of "bonds borrowed" in security holdings, in the computation of the 1902 ratio.⁹ Of the remaining three occasions, one (1878-79) derives its quality from the sharp loan expansion which began at the end of 1879, in final recovery from the panic of 1873. A comparison of the securities held as late as the autumn call of 1879 with those held at a corresponding date of the preceding year would show increase instead of reduction. The significant occasions are 1905-06 and 1909-10, in each of which periods the initial year was marked by relatively heavy bond-buying—1905 as a year of high business prosperity, 1909 as a year of premature business recovery.¹⁰

The gain in relative importance of securities has not been at the expense of any one item or group of items of banking assets. One element after another has tended to increase or diminish, in response to specific episodes in our monetary history; but the point of arrest or reversal has been far less remote. Up to 1890 the gain in the security ratio is absorbed in the decline in relative importance of investments in United States bonds. From 1890 to 1900 the gain is reflected in the decline in the ratio of loans and discounts to total resources. From 1900 on, the explanation is found in a composite of smaller declines in the ratios of United States bonds, lawful money, and due from banks. The percentage relation of the important constituent items to the aggregate resources of national banks has been, for each year since 1863, as follows:¹¹

⁹ Cf. page 1, above.

¹⁰ If instead of the averaged, the autumn calls be compared, three additional arrests are noticeable—1865-66, 1896-97, and 1911-12, whereas that of 1878-79, as noted above, disappears.

¹¹ The percentages of loans, United States bonds, and lawful money from 1897 to 1912 are taken from the 1912 report of the Comptroller of the Currency (Table 47, p. 197). For the years before 1897, it has not been possible to use the percentages in the corresponding tables in earlier reports, since, as Comptroller Lawrence O. Murray informs me, "it appears that for the years prior to 1897 the combination of the capital stock, surplus, undivided profits, national bank circulation, and individual deposits was used as the basis of the computation instead of the aggregate resources."

TABLE 2.—Percentage of loans, United States bonds, lawful money, net securities, and due from other banks to total resources.

Year	Loans	U. S. bonds	Lawful money	Net securities	Due from other banks
1863	32.3	33.5	8.3	.5	15.5
1864	31.3	36.3	15.0	.4	11.4
1865	35.8	31.4	15.2	1.3	7.8
1866	39.5	27.9	14.0	1.0	8.0
1867	40.6	27.9	7.5	1.4	6.9
1868	42.1	26.5	6.7	1.3	7.0
1869	45.6	25.6	7.1	1.4	6.7
1870	47.3	25.0	6.4	1.5	7.2
1871	48.0	23.6	7.0	1.4	8.2
1872	49.9	23.3	6.9	1.3	7.2
1873	51.5	22.5	7.2	1.2	8.1
1874	50.8	21.9	7.6	1.4	7.1
1875	52.3	21.1	7.0	1.7	7.8
1876	50.9	21.0	7.3	1.8	8.0
1877	51.2	21.9	7.0	1.9	7.4
1878	47.1	25.0	7.2	2.0	7.8
1879	47.0	22.9	7.3	2.1	8.9
1880	49.4	19.0	8.2	2.3	10.1
1881	49.7	17.8	7.3	2.6	9.7
1882	51.8	16.4	7.2	2.7	8.2
1883	55.1	16.0	7.9	2.9	8.8
1884	54.6	15.9	9.6	3.1	5.8
1885	53.6	13.9	10.8	3.1	9.6
1886	57.7	11.5	8.9	3.2	9.5
1887	60.5	8.5	9.3	3.3	9.7
1888	59.8	8.2	9.5	3.5	10.4
1889	60.6	6.4	8.8	3.6	11.1
1890	63.2	5.4	8.9	3.6	10.6
1891	62.4	5.4	9.2	3.8	10.5
1892	61.8	5.2	9.3	4.4	11.6
1893	59.2	7.2	11.1	4.7	8.9
1894	57.7	6.4	11.5	5.5	11.4
1895	60.1	6.8	9.9	5.6	10.9
1896	58.0	8.0	10.5	5.7	10.1
1897	55.3	7.0	6.4	5.6	13.3
1898	54.2	10.6	9.2	6.3	13.1
1899	53.7	7.1	10.0	6.8	14.7
1900	53.2	8.1	10.3	7.2	14.5
1901	53.0	7.8	9.5	7.8	13.7
1902	53.7	7.5	8.3	8.0	13.4
1903	55.2	8.6	8.8	7.9	12.9
1904	53.4	7.9	7.2	8.1	13.7
1905	53.9	7.4	8.9	8.4	13.8
1906	54.0	7.8	7.8	8.1	13.3
1907	56.1	7.9	8.4	8.4	12.7
1908	52.9	7.9	9.6	8.9	13.3
1909	53.5	7.6	9.5	9.2	12.8
1910	55.6	7.5	8.9	8.4	12.3
1911	54.5	7.4	8.6	9.5	12.5
1912	55.1	7.1	8.1	9.4	13.1

II

The course of bond accumulation by the national banks reflects the expansion of banking operations in relation to general financial and industrial development.

From the organization of the national banking system in 1863 to the panic of 1873, the banks of the country made no significant additions to their security holdings. Upon two occasions—January-April, 1867, and March-June, 1870—abrupt increases occurred, traceable to special transactions, but thereafter holdings remained fairly constant around the higher levels. Of the original amount so held, the largest part, owned in the main by eastern city banks, might be regarded as a heritage from the reorganized state banks. On April 1, 1867, the 1,642 banks in operation, with total resources of \$1,465,000,000, held only \$20,194,000 securities, of which more than one half was owned by the banks of New York, Albany, Philadelphia, and Boston, and practically three fourths by banks in the states of New York, Massachusetts, and Pennsylvania. With the rapid reduction of the national debt and the tempting rise in the price of government securities in the years following 1866, the banks reduced their holdings of United States bonds used for purposes other than to secure circulation; but the proceeds of such liquidation were utilized as reserves and credited to surplus and undivided profits. The return of business activity from 1869-1870 on brought with it an expansion of banking energy; the number of banks increased from 1,612 in 1870 to 1,968 in 1873, and the volume of loans grew correspondingly. But again during these as during the earlier years, the banks acquired no additional securities. Indeed, allowing for the additional banks organized and the continued liquidation of United States bonds, the contrary tendency prevailed. In absolute amount the security holdings of the banks from 1870 to 1873 remained almost constant and in proportion to loans, deposits, and banking capital, the importance of such holdings actually declined.

Thus during the first decade of the national banking system the practice of bond purchase, whether as a "secondary reserve" or otherwise, had not yet begun to show itself. This was true both of years of depression and of years of business activity. In dull times idle money accumulated; in brisk times it was absorbed in loan expansion. Barring special transactions the investment of any appreciable part of their productive resources in bonds

was neither a common nor a growing practice of the national banks.

The crisis of 1873 culminated in panic in the last ten days of September—during which time the New York Stock Exchange remained closed. Banking operations during the panic are primarily of interest in the present connection as indicating the non-liquid character of bonds in time of financial spasm. From September 12 to October 13, 1873, the banks reduced their loans from \$944,000,000 to \$882,000,000 and deposits of all kinds fell off from \$638,000,000 to \$530,000,000. But between the same dates, the security holdings of the banks actually increased from \$23,700,000 to \$25,400,000.¹²

The collapse of 1873 was followed in customary sequence by a period of utter prostration (1873-74) and this by a premature and short-lived revival (1874-75). During both prostration and premature revival the banks added to the relative importance of their security holdings with notably greater rapidity than in the profound and long continued depression which succeeded (1875-79). The post-panic loan recovery culminated in October, 1875, the account then showing a new gain of 4.2 per cent over the pre-panic date; but in this same interval security holdings increased rapidly and uninterruptedly from \$23,700,000 to \$33,500,000 or 41.3 per cent. On the other hand, the depression of 1875-79, marked by a continuous reduction in loans, was accompanied by a very gradual increase in bond investments—the gain in relative importance, despite reduction in total resources, being less from year to year than in the post-panic period.

Business activity returned in 1879, and culminated in 1882. Banking operations, however, continued to expand, although at diminished rate, for two years more. Loans increased rapidly from 1879 to 1882, reaching a maximum in 1884, and cash reserves and loan rates showed similar tendencies. The growth in security holdings closely paralleled this expansion, such investments increasing from \$39,600,000 in 1879 to \$66,100,000 in 1882 and to \$71,300,000 in 1884.

¹² The minor disturbances of 1884 and 1890 were attended by the same phenomena. The panic conditions of May, 1884, were reflected in a shrinkage of loans from \$1,333,000,000 on April 29 to \$1,269,000,000 on June 20, whereas security holdings declined only from \$73,400,000 to \$72,500,000. The stringency of November, 1890, appeared in a reduction of the loan account from \$1,986,000,000 on October 2 to \$1,932,000,000 on December 19; but between the same dates the bond holdings of the banks actually increased from \$115,500,000 to \$116,600,000.

The industrial world recovered from the disasters of 1884 with surprising rapidity. Before the spring of 1886, bank loans had reached and passed the high point of pre-panic conditions. Thereafter up to 1890, the expansion of credit, keeping pace with heightened business activity, was even more notable. The movement was arrested rather than reversed by the financial stringency of 1890. Loans moved up cautiously again in 1891 and 1892, until the mid-year collapse of 1893. During the first phase (1885-1890) of this period the bond purchasing policy of the banks underwent no change. The banks simply invested a gradually increasing proportion of their increased resources in additional securities. From 1884 to 1890 the ratio of bond holdings to loans and discounts remained almost constant, and the ratio to assets increased slowly and regularly. Specific influences contributed to this stability. The era of industrial combination and syndicate flotation, on the scale which the events of the next decade were to make familiar, had not yet dawned. Furthermore, from 1886 on the banks inclined to apply some part of the resources which otherwise might have been devoted to investment securities to the purchase of United States bonds, with a view to securing deposits from out the federal surplus. With the stock market liquidation of 1890 and the check to business activity which followed, the banks tended to larger investment in securities. The ratio of bond holdings to loans and to resources rose sharply through 1891-92.

The business world began to show signs of fatigue by the end of 1892. The increase in deposits was checked, the reserves of lawful money declined and the expansion of loans ceased. Accompanying this arrest was stoppage in bond buying. The panic months (May-October, 1893) witnessed contraction in loans, reduction in deposits, and abrupt withdrawal of cash, followed by rapid accumulation of lawful money. During this interval security holdings remained virtually stationary—\$150,700,000 on May 4, \$149,600,000 on July 12, \$148,500,000 on October 3. Practically no relief whatever was afforded the panic strain by the liquidation of bonds, while very slight preparatory aid was derived from the same source.

The panic of 1893 was followed by industrial prostration and agricultural depression. There was false recovery early in 1895, but relapse followed and business remained stagnant until with bumper crops and gold imports activity definitely returned in

the summer of 1897. During these four years banking operations fluctuated within narrow limits. The loan account had barely returned to the pre-panic level in October, 1897, and in this recovery the country banks played no part. Security holdings, on the other hand, increased no less than 40 per cent within the same period. But practically all of this occurred in 1894 and in 1897. In 1895-96 there was, actually, slight liquidation, the surplus cash then at the disposal of the banks being in part applied to the purchase of United States bonds, in part returned to the shareholders in reduction of capital stock, in part retained by the banks as excess reserves.

The decade from 1897 to 1907 is still fresh in mind as a period of industrial energy and financial activity—perhaps the most memorable in the history of the United States. Agriculture prospered, manufactures developed, railroads revived, and industrial enterprises expanded and consolidated. These conditions were reflected in a notable growth of banking activity. The loans of the national banks increased from \$2,066,000,000 to \$4,678,000,000 and individual deposits from \$1,853,000,000 to \$4,319,000,000. From 1902 on further expansion was checked only by the close approach of cash holdings to legal reserve requirements. During this entire period the banks applied an increasing proportion of their resources to the purchase of bonds. Security holdings grew from \$208,800,000 in 1897 to \$708,500,000 in 1907. In absolute amount the increase was uninterrupted; in relation to loans and resources the movement was most pronounced from 1897 to 1901, continuing more slowly thereafter to the close of the period. Only in 1905, in reflex of the extraordinary loan expansion of that year was the tendency reversed.

The crisis of 1907 culminated in panic conditions in October-November 7. Between August 22 and December 3—the closest dates for which figures are obtainable—there occurred, coincident with reduction in loans, deposits, and reserves, an actual increase in security holdings, both absolute and relative to total resources. The certainty of this evidence is somewhat obscured by the large amount, \$106,100,000, of bonds borrowed by the banks between the panic dates.¹³ Such borrowing facility, tending as it did to

¹³ A consequence of Secretary Shaw's first acceptance of other than United States bonds to secure government deposits in 1902, had been to encourage the national banks in the practice of borrowing for temporary use from other banks, trust companies or individuals, up to that time, United States bonds, but thereafter state, municipal, and corporate securities acceptable as se-

make possible an increase in cash reserves by securing larger public deposits, might at first glance be construed as relieving the banks to that extent from the necessity of liquidating their securities and, accordingly, as explaining the absence of any such liquidation. As a matter of fact, however, the actual resort to such borrowing on as extensive a scale as transpired, with all the exceptional circumstances that attended it—marked the rigidity of the bank's security holdings. Had these securities possessed any liquid character whatsoever, realization in this direction would have been, during the panic weeks, by far the line of least resistance.

The course of events since 1907 has repeated the familiar sequence of post-panic history. Loans contracted in the prostration of 1908, recovered in the premature revival of 1909, slowed up again in the reaction of 1910-11, and entered upon a healthier expansion in 1912. In the matter of security holdings, the early action of the banks was determined largely by the incidents of the panic. With the withdrawal of government deposits in the succeeding eighteen months, a large part of the "bonds borrowed" was released from service as collateral—not, however, to be returned to the institutions and individuals from whom borrowed but apparently to be purchased and transferred to the productive investments of the banks. In the twelve months of 1911 the security holdings of the banks increased from \$858,700,000 to \$1,017,700,000, whereas the years 1912 and 1913 have been marked by small and gradual additions.

III

Although the banks have applied an increasing proportion of their resources to investment securities, this movement has been

curity for public deposits. The authorization of this practice is indicated by the appearance in the Comptroller of the Currency's abstract report of the liabilities of the national banks of an item "bonds borrowed," first in the returns of November 25, 1902, and regularly thereafter. The amount of bonds so obtained by the banks was fairly constant from 1902 through the greater part of 1906; at only one date (March, 1904) did the figure rise markedly. From the end of 1906, however, with the increasing strain upon the money market and the more liberal response of the treasury in placing public deposits there was more active bond borrowing by the banks, continuing until the lull of the summer of 1907 permitted a reduction of the account. During the panic weeks, this movement was actively resumed, the natural impulse of the banks to seek such aid being then stimulated by the relief committee of the New York trust companies, acting under the initiative of Mr. J. P. Morgan.

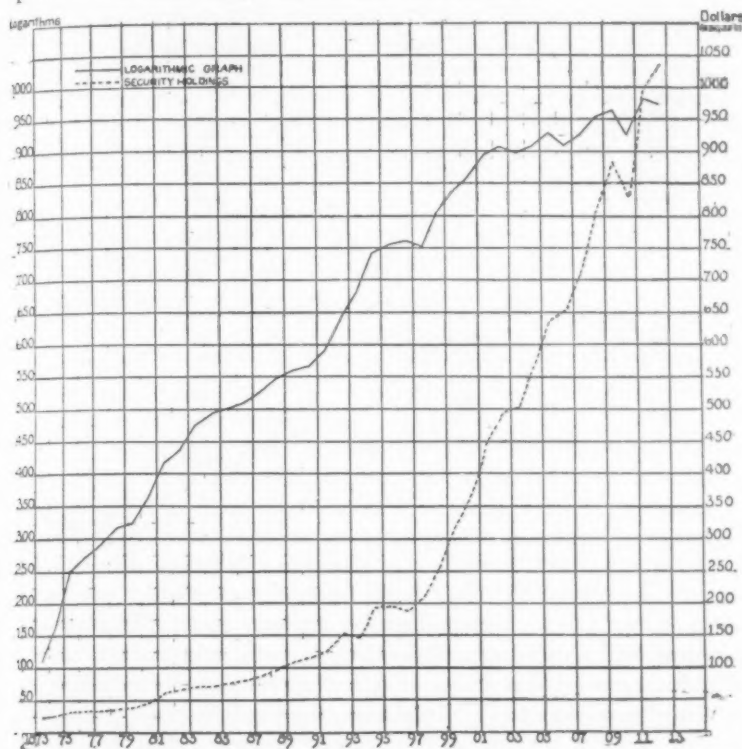
continuous in tendency rather than uniform or regular in pace. An examination of the changes in ratio from year to year indicates that the gain has been markedly greater in certain periods than in others. The principle of variation which might be supposed to prevail, in accordance with the theory of "secondary reserve," is that the banks buy bonds rapidly in dull times when cash accumulates and business demands slacken, and slowly or not at all, or, indeed, liquidate some part of such holdings as they have, when business is active and cash in demand. The actual course of variation, as exhibited in the experience of the national banks, both in aggregate and in groups, has been notably different from this simple or absolute movement. The following table shows the percentage increase or decrease in the ratio of securities to total resources for each year over the corresponding ratio of the year preceding:

TABLE 3.—Percentage increase or decrease in the ratio of securities to total resources.

Year	Averaged calls	Autumn call	Year	Averaged calls	Autumn call
	<i>Per cent</i>	<i>Per cent</i>		<i>Per cent</i>	<i>Per cent</i>
1868	-0.7	-7.6	1891	2.6	5.9
1869	4.6	12.1	1892	8.6	13.1
1870	5.9	5.4	1893	8.9	8.4
1871	-4.8	-9.6	1894	18.7	16.5
1872	-5.8	-5.6	1895	3.2	2.3
1873	-0.7	-3.0	1896	0.1	1.5
1874	12.5	14.7	1897	0.5	-2.5
1875	14.6	20.2	1898	6.8	13.1
1876	6.7	5.6	1899	9.1	8.0
1877	6.8	4.7	1900	6.1	5.6
1878	9.0	5.5	1901	7.4	8.2
1879	-4.4	1.4	1902	5.5	2.4
1880	10.7	9.4	1903	-1.6	-1.4
1881	14.3	13.4	1904	1.1	2.2
1882	13.7	4.9	1905	5.1	4.5
1883	4.2	8.7	1906	-3.2	-4.1
1884	6.1	4.3	1907	2.3	3.6
1885	2.2	1.9	1908	7.5	6.2
1886	3.1	2.2	1909	1.6	2.7
1887	2.7	4.0	1910	-7.9	-8.3
1888	5.0	4.7	1911	10.2	13.4
1889	2.7	2.8	1912	2.2	-1.6
1890	4.6	0.8			

The proportional change for all parts of the period considered is shown graphically in the following logarithmic curve, in which the proportional rate of change is indicated directly by the steepness of the curve at the given point. There is also a graph showing

the absolute amounts of net security holdings covering the same period. In both cases the autumn call is used:



As appears from the foregoing curve, the years of most rapid increase from 1890 on were 1891-94, 1898-01, 1905, 1908, and 1911; whereas the years of slowest increase or of outright decline were 1895-97, 1902-04, 1906-07, 1909-10, and 1912. The smallest percental increase (4.5 in 1905) in the first group of years exceeds the largest percental increase (3.6 in 1907) in the second group. The increase or decrease in ratio in particular years or groups of years may result from unusual changes in either of the two factors that determine the proportion—amount of securities or volume of resources. As a matter of fact, with exception of 1893 in the case of the "rapid" years and of 1910 in the case of the "slow" years, the marked changes result primarily from abrupt variation in the amount of securities rather than in the volume of total resources. In the following table, comparison is made of the

bonds acquired in these two groups of years, both as percentage gains and as absolute amounts:

TABLE 4.—Comparison of the bond purchases in different years.

Periods	Average annual per cent gain	Absolute increase (million dollars)
"Rapid" periods		
1891-94	10.9	78
1898-01	8.7	210
1905	4.5	68.4
1908	6.2	101.4
1911	13.4	166
		11) 623.8
		56.7 average annual absolute gain
"Slow" periods		
1895-97	0.4	15
1902-04	1.0	118
1906-07	-0.2	73.5
1909-10	-2.8	20.6
1912	-1.6	38
		11) 265.1
		24.1 average annual absolute gain

If these grouped years be considered in relation to general economic characteristics,¹⁴ the "rapid" periods comprise, in the main, years either of (a) intense business activity or of (b) complete prostration following financial crisis, or both, whereas the "slow" periods include years either of (a) business depression following panic prostration or of (b) business reaction following speculative excess, or both. Thus, of the "rapid" periods, 1891 and 1892 were the highly active years that preceded the panic of 1893, and 1894 was the year of prostration that succeeded the crisis. The years from 1898 to 1901 formed a notable period of industrial expansion and financial adventure—interrupted by mild reaction in 1900—during which the characteristic problems of modern corporate organization first became conspicuous; 1905 was a year of high prosperity; and post-panic prostration again distinguished 1908; 1911, though of mixed quality, was attended by the incidents of reaction from premature business recovery. Of the slow

¹⁴ Cf. Professor Wesley C. Mitchell's valuable studies in the *Journal of Political Economy*, in particular the conspectus in "Security Prices and Interest Rates in 1910-12," *ibid.*, June, 1913. The same author's monumental *Business Cycles* (University of California Press) has reached me, unfortunately, only as these pages are passing through the press.

periods, 1895-97 was marked by the depression which follows post-panic prostration; 1902-04 and to a considerable extent 1906-07 were periods of relapse from speculative excess; 1909-10 represented premature recovery and consequent relapse; and 1912 exhibited the hesitant characteristics of imperfect business revival.

The same tendencies, although less conspicuous, are traceable in the period before 1890. Omitting the first decade of the national banking system as antedating the movements under consideration, the subsequent years of relatively rapid bond buying were 1874-75, a period of premature business revival, and 1880-84 and 1887-88—periods of marked business activity; whereas the years of relatively slow bond buying were 1876-79 and 1885-86, periods of business depression consequent upon financial disturbance, and 1889-90, a period of business arrest. In the panic of 1873, and in the minor disturbances of 1884 and 1890, the banks either kept their security holdings virtually intact or made absolute addition thereto.¹⁵

These movements can be summarized in the following tentative statement: The national banks buy bonds freely in periods of high business activity characterized by attendant circumstances of large cash deposits, active markets, pool operations, security flotations and syndicate underwritings. This upward movement is checked by the fatigue which follows speculative excess and fore-shadows the advent of financial disturbance. Panic strain is neither anticipated nor relieved by the liquidation of securities. With the prostration that marks the end of spasm, securities are again freely acquired—in part the enforced taking over of hypothecated collateral, in part the productive reinvestment of swollen reserves. This prostration is succeeded by depression, marked by smaller cash deposits and inactive financing, during which the banks add but slowly to their bond holdings. If there be premature recovery, securities are bought more actively; but with the relapse into dullness this tendency in turn is arrested. Not until business activity is resumed on a large scale are bonds again bought with rapidity and the cycle resumed.

¹⁵ It would be extremely interesting to study the cyclical relation of bond buying to the crises of 1893 and 1907 and to the disturbances of 1884 and 1890. We should probably find that, in this particular at least, the business cycle is tending to pass from the long revolution to a succession of minor swells and depressions. Such a study might very well be incident to an analysis of the variations in security holdings of the New York banks (see Professor O. M. W. Sprague's useful *History of Crises under the National Banking System*, Washington, 1910).

IV

In accordance with the theory of "secondary reserve," a marked seasonal fluctuation in security holdings might be anticipated. This should take the form of purchase in the spring and summer when money is easy and of liquidation in the autumn in preparation for the interior drain.

Examination of the returns made by the banks to the Comptroller of the Currency for the five calls distributed at approximately uniform intervals over each year afford little evidence of such recurrent liquidation. Of the forty years of banking experience from 1873 to 1913, it appears that in seventeen years there has been either constancy or actual increase in security holdings from each call to the succeeding call. In the remaining twenty-three years, there has been actual liquidation in the volume of such holdings between some two consecutive calls.

There has, moreover, been no uniformity as to the season in which such reduction has occurred. In three, out of the twenty-three liquidating years, the movement took place in the first half-year; in thirteen, in the second half-year; in two, there was overlap. Of the thirteen second half-year movements, the decline occurred between the summer and autumn calls in one year, between the autumn and year-end calls in five years, between the year-end and first-year calls in two years; in five years the autumn to year-end liquidation extended back to the summer call or forward to the first-year call, or both.

A seasonal fluctuation, if tested by absolute amount, is likely to be obscured by the rapid growth in banking resources. In such event, the variation will take the form of slower increase rather than of outright decrease. If the security holdings of the banks be averaged at corresponding seasonal dates, for the period from 1873 to 1913, and the results compared, a traceable although inconsiderable variation is evident:

Call	Average holding (million dollars)	Per cent gain over preceding call
No. 1 (first-year)	276.9	1.8 ¹
" 2 (spring)	283.8	2.5
" 3 (summer)	291.0	2.4
" 4 (autumn)	295.9	1.6
" 5 (year-end)	297.0	0.3

¹ Computed as the increase in the average holding at the first-year call for 1874-1913, over the average holding at the year-end call for 1873-1912.

The table of average holdings at seasonal dates shows that activity in bond buying declines in intensity with the calendar year, being greatest from the first-year to spring, then less pronounced from spring to autumn, then imperceptible from autumn to the year-end, after which there is recovery through the year-end back again to the midwinter calls. The period of freest purchase is from midwinter to spring and of greatest restraint from autumn to the year-end. In so far, the variation corresponds with the familiar seasonal fluctuation of currency demands.

Examining the average ratio of securities to total resources at seasonal dates the same general movement is traceable. The ratio increases from the first-year through the autumnal date, but the rate of gain is more rapid from first-year to summer than from summer to autumn, and is replaced by outright decline between the autumn and the year-end. Some part of this arrest is of course due to the inverse course of loans and discounts and other constituents of total resources. But the characteristic quality is imparted by variation in bond buying.

Call	Average per cent to resources	Average per cent gain over preceding call
No. 1 (first-year)	4.977	1.1 ¹
" 2 (spring)	5.025	1.0
" 3 (summer)	5.109	1.7
" 4 (autumn)	5.150	0.8
" 5 (year-end)	5.123	— 0.5

¹Cf. note under preceding table.

V

Turning to the several groups of banks, the same general tendencies are evident as in the case of the banks in aggregate. The country banks, the reserve city banks, the central reserve city banks and the New York city banks have all invested an increasing proportion of their resources in securities, and the rate of such investment has varied more or less directly with prevailing business conditions. The ratios of net security holdings to total assets for the several banking groups at the autumn call in each year since 1883 are presented in the following table:

TABLE 5.—*Ratios of net security holdings to total assets by groups.*

Year	All	Country	Central	Reserve	New York
1883	2.99	3.59	2.89	1.78	2.84
1884	3.12	3.72	2.99	1.86	3.14
1885	3.18	3.82	2.86	2.10	2.96
1886	3.25	3.91	2.82	2.09	2.98
1887	3.38	3.96	3.34	2.09	3.49
1888	3.54	4.19	3.36	2.25	3.57
1889	3.64	4.23	3.52	2.42	3.68
1890	3.67	4.04	3.87	2.70	4.23
1891	3.89	4.26	4.12	2.86	4.44
1892	4.40	4.78	4.55	3.45	5.01
1893	4.77	5.34	4.86	3.50	5.21
1894	5.56	6.37	5.28	4.24	5.68
1895	5.69	6.63	5.24	4.32	5.81
1896	5.78	6.56	5.55	4.44	6.24
1897	5.63	6.73	5.01	4.20	5.54
1898	6.37	7.07	6.17	5.29	6.68
1899	6.88	7.96	5.90	6.12	5.99
1900	7.27	8.17	6.45	6.66	7.17
1901	7.87	9.07	6.25	7.66	7.11
1902	8.06	9.42	6.45	7.50	7.09
1903	7.94	9.14	6.61	7.14	7.82
1904	8.12	9.56	6.83	7.10	7.85
1905	8.49	10.08	6.91	7.46	8.08
1906	8.14	9.39	7.27	6.77	8.55
1907	8.44	9.34	8.38	6.88	10.20
1908	8.97	10.50	7.97	7.33	8.94
1909	9.22	10.93	8.12	7.37	9.36
1910	8.45	10.13	7.45	6.36	8.67
1911	9.59	11.08	9.34	7.26	11.31
1912	9.43	11.22	8.19	7.34	9.86

In the case of the groups of banks as with all the banks, the percentage ratio of securities to assets has increased without notable interruption. As against the five years since 1883, in the case of all banks, in which the percentage of securities was not greater at the autumn call than at the corresponding date of the year preceding, there have been six periods of arrest in the case of the country banks, eight in the case of the reserve banks, nine in the case of the central reserve banks, and eight in the New York city banks.

Of the several groups, the country banks have been the readiest investors in securities. The proportion of resources so employed by the country banks at the latest autumn date available (11.2 per cent on September 4, 1912) has never been equalled by any other banking group outside of the New York city banks, and only on one highly exceptional date by the New York city banks (11.3 per cent on September 1, 1911). More than this, in only two years (1907 and 1911) since 1892 have the country banks not held, at the autumn call, larger percentages of their assets in

bonds than any of the other groups—the larger ratios in both exceptional instances pertaining to the New York banks. Next to the country banks in ratio of security holdings to total resources have been the New York city banks. The reserve and central reserve follow at some distance thereafter, with the central reserve banks tending to forge ahead in consequence of the influence of New York.

The variation from year to year in the proportion of resources invested in securities has been more marked in the case of the groups of banks than of all banks, by reason of the smaller denominator. The percentage change from year to year for each group of banks is set forth in the following table:

TABLE 6.—*Annual percentage change by groups.*

Year	All	Country	Reserve	Central	New York
1884	4.3	3.6	4.4	6.0	10.5
1885	1.9	2.6	12.9	-4.3	-5.7
1886	2.2	2.3	-0.4	-1.3	0.6
1887	4.0	1.2	0.0	18.4	17.1
1888	4.7	5.8	7.6	0.5	2.2
1889	2.8	0.9	7.5	4.7	3.0
1890	0.8	-4.4	11.5	9.9	14.9
1891	5.9	5.4	5.9	6.4	4.9
1892	13.1	12.2	20.6	10.4	12.8
1893	8.4	11.7	1.4	6.8	3.9
1894	16.5	19.2	21.1	8.6	9.0
1895	2.3	4.0	-0.4	-0.7	2.2
1896	1.5	-1.0	5.2	5.9	7.4
1897	-2.5	2.5	-5.4	-9.7	-11.2
1898	13.1	5.0	25.9	23.1	20.5
1899	8.0	12.5	15.6	-4.3	-10.3
1900	5.6	2.6	8.8	9.3	19.6
1901	8.2	11.0	15.0	-3.1	-0.8
1902	2.4	3.8	-2.0	3.2	-0.2
1903	-1.4	-2.9	-4.8	2.4	10.2
1904	2.2	4.5	-0.5	3.3	0.3
1905	4.5	5.4	5.0	1.1	2.9
1906	-4.1	-6.8	-9.2	5.2	5.8
1907	3.6	-0.5	1.6	15.2	19.2
1908	6.2	12.4	6.5	-4.8	-12.3
1909	2.7	4.2	0.5	1.8	4.6
1910	-8.3	-7.4	-13.7	-8.2	-7.3
1911	13.4	9.3	14.1	25.3	30.4
1912	-1.6	1.2	1.1	-12.3	-12.8

The same general correspondence between bond buying and business activity noticeable in the case of all banks may be traced in the several banking groups. The years of large relative increase in security holdings have been periods of great business activity or of post-panic prostration. The years of small increase or relative decline have been periods of speculative reaction or of

business depression. In the following table comparison is made of the bonds acquired by the several banking groups in the years heretofore segregated, the percentages representing the averaged proportional increase, or decline, in the ratio of security holdings to total resources at the autumn call:

TABLE 7.—Comparison of bond purchases in different years by banking groups.

Periods	All	Country	Reserve	Central reserve	New York city
"Rapid" Periods					
1891-94	10.9	12.1	12.2	8.0	7.6
1898-01	8.7	7.8	16.3	6.2	7.2
1905	4.5	5.4	5.0	1.1	2.9
1908	6.2	12.4	6.5	-4.8	-12.3
1911	13.4	9.3	14.1	25.3	30.4
"Slow" Periods					
1895-97	0.4	1.8	-0.2	-1.5	-0.5
1902-04	1.0	1.8	-2.4	2.9	3.4
1906-07	-0.2	-3.6	-3.8	10.2	12.5
1909-10	-2.8	-1.6	-6.6	-3.2	-1.3
1912	-1.6	1.2	1.1	-12.3	-12.8

It will be seen that the country banks have followed without material change the course already traced of the banks in aggregate. In the case of the reserve city banks the contrasting variations are somewhat exaggerated, both gains and losses inclining to be greater than in the case of all the banks. The New York city banks, while corresponding in the main with the general movement, present abrupt departures in particular years, and this variation is reflected in the percentages of the central reserve banks by reason of the dominant influence of New York city. Thus in 1896, in 1903, in 1906-07, and in 1912, the reduction in loans and reserves of the New York city banks was much in excess of that of the country banks and even of the reserve city banks, with no correspondingly greater liquidation in bond investments—resulting in relatively higher ratios of securities to reserves in the case of the New York banks. On the other hand, in 1899 and again in 1901, while the country and the reserve city banks added notably to the relative importance of their bond holdings, the New York banks actually reduced their ratios.¹⁶

¹⁶ In 1907-08, both the post-panic increase and the subsequent decline in the relative importance of security holdings occurred earlier in the case of the New York city banks than of the other banking groups, so that the New

VI

The actual course of bond buying by the national banks, as set forth above, makes necessary some amendment of the explanation commonly advanced of such banking practice, and suggests some revision of public assent thereto as sound banking policy.

It appears that the banks have continuously devoted an increasing part of their resources to the purchase of bonds, in contrast to the movement of loans and discounts and cash reserves, until the amount so invested now practically equals their paid-in capital stock.

The occasions for such purchase, as evidenced by a comparison of alternating periods of rapid and slow acquisition, have been not only the accumulation of unemployed funds and the absence of other channels of profitable employment in periods of business prostration, but also the attractiveness and pressure of new security flotations by reason of syndicate participation, anticipated rise in value or mere corporate contacts, in times of business activity.

Securities so acquired fail notably to serve as a form of secondary reserve to meet the demands of expanding business or panic strain, being non-liquid either in seasonal or in cyclical requirement, in accordance with what might be designated the "lobster-pot" theory of customary purchase at high price levels and of reluctance to sell at low price levels.

This condition seems to call for remedial action—restrictive, on the one hand, in the form of some limitation upon the present complete freedom of the banks to make such investments, and positive, on the other hand, in the provision of more acceptable kinds of investment for unemployed funds. It is obviously inexpedient for the national banks designed as agencies of commercial loan and discount, to be permitted to tie up at inopportune periods increasing parts of their resources in what experience has shown to be practically immobile forms of investment—with consequent restraint upon lending power and greater costliness of commercial discount. In so far as the motive of such investment is the lure of larger interest return and of speculation for the rise, the practice is indefensible. In so far as the purchase of bonds

York ratio for 1907 is relatively larger and that for 1908 smaller, than elsewhere. In this connection and elsewhere, comparison of the security holdings of the several banking groups, distinguished with respect to sectional location, would be of much interest.

by the banks has grown up as an incident of modern corporate financing—induced by the requirements of the corporations rather than by the necessities of the banks—the occasion itself is valid but the mode of its exercise improper. An essential function of an efficient money market is the temporary holding of security issues in the interval between original emission and definite absorption by investors. But this service cannot be economically undertaken nor adequately performed by commercial banks. Aside from matters of equipment and competence, there is an inevitable coincidence in time between the demand for such fiscal service and the requirement for ampler commercial accommodation—with the result of strain and cost to the credit-using community.

An outright prohibition of bond buying would under present conditions, leave the banks at recurring intervals with large amounts of idle money. It is at least an open question whether even under such conditions the advantage of larger reserves, greater elasticity in lending power, and lower discount rates would not compensate for the loss of idle money. But the occasion for such a weighing of advantage and disadvantage is removed by the reasonably certain prospect that impending currency legislation will for the first time give the banks an opportunity to constitute a true secondary reserve for the investment of idle money by authorizing the acceptance and rediscount of commercial paper. Accustomed as the banks are to bond buying and its accompanying incidents, it is doubtful whether the mere establishment of a discount market would of itself destroy existing practices. Coupled with restrictive legislation, the way would seem to be clear for the successful operation of both changes in banking procedure.

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THE COST OF GOVERNMENT IN MINNESOTA

An investigation has recently been completed, by authority of the Minnesota Tax Commission, relating to the total cost of all grades of government, and also the cost in each of 326 incorporated places in Minnesota during the fiscal year 1911.¹ Some of the facts brought to light by this investigation, especially as to the variation of cost with size of city, are of sufficient theoretical interest to students of public finance to warrant a more extended analysis than could be given in an official report.

In most investigations of cost of government, expenditures have been taken as the measure of cost. If all governmental units of like grade had identical functions, this measure might serve, at least for the purpose of comparison. In point of fact, however, an extraordinary variety of functions is found, especially in the matter of municipal trading. One city owns water and light plants, a public market, an auditorium, and perhaps still other public service enterprises, which are financed chiefly, or it may be entirely, from the sale of commodities or services; another city has none of these things and relies exclusively on the proceeds of taxation. If expenditures be taken as the measure, the cost of government will necessarily appear to be enormously greater in the first city than in the second: yet the tax levy may be much lower in the city having the higher apparent cost of government. Moreover, it is perfectly apparent that what a man pays for water and light is no more a part of the cost of government than are his similar payments for groceries and dry goods; and this is equally true, whether the water and light plants are operated by a private corporation or by the city. No mere change in ownership of such enterprises can change the character of the consumer's expenditure; any more than the establishment of a municipal milk supply could suddenly transform another private household expenditure into a part of the cost of government. In all these cases the purchaser merely pays for value received, that is, for a commodity or a special service. The transaction is, therefore, purely private and commercial in character, irrespective of whether the seller be an individual, a private corporation, or a public corporation. Consequently, all forms of municipal trading figure in the cost of government only in the event and to the extent that they fail to be self-supporting and become a charge on the general revenues.

¹"The Cost of Government in Minnesota," by E. V. Robinson, ch. 15 (pp. 242-587) of the *Report of the Minnesota Tax Commission* (St. Paul, 1912).

In like manner, when a man pays a special assessment for a ditch, or sewer, or sidewalk, he is helping to pay for a public improvement which is supposed to increase the selling value of his property by at least the amount of his assessment. In case it does this, he gets back, in another form, all that he pays. Only in case he is assessed more than the benefit to his property is he taxed at all, while in all cases where he is assessed less than the benefit to his property, he actually profits by the transaction. It is clear, therefore, that special assessments, unless in excess of benefits to the property, are not a part of the cost of government.

For these reasons, it is essential, in order really to arrive at a common measure of the cost of government, to keep the finances of public service enterprises distinct from general public finances; and also sharply to separate special assessments from taxes, special assessment loans from general loans, and interest payable on special assessment loans from interest on general loans.

Owing to the foregoing considerations, receipts of local coercive revenues—taxes, licenses, fees and fines, paid within the area governed—were taken as the measure of the cost of government in Minnesota. This measure, it is true, does not show how rapidly debt is being piled up: but neither would a statement of expenditures show the relation between general revenues or ordinary receipts, on the one hand, and payments for current expense and interest, on the other. In order to bring out this relationship, which is the really vital thing in connection with debt, the ratio of current expense and interest to general revenues (exclusive of commercial receipts and special assessments) was calculated for each of the 143 municipalities having over 1,000 population. The cost of government measured by coercive revenues, and the per cent of current expense and interest to general revenues, taken in connection with one another reveal the character of the financial operations of the year at a glance.

The usual practice has been to employ only the per capita basis for comparison, owing to the lack of reliable data as to the true valuation of property. This is the case with the census statistics of cities, and with most if not all of those published by the various states. In Minnesota, however, the tax commission had for some years compiled records of real estate sales, including about 250,000 transfers. These records from January 1, 1910, to January 1, 1912, were used to find the ratio of assessed to true valuation of real estate in each city and village, each county, and in the state as a whole. The true valuation of all property was then obtained

by employing a fixed ratio (28 per cent) of assessed to true valuation for all personal property actually appearing on the tax rolls, aside from money and credits which are taxed at a different rate. In this way it becomes possible to compare the costs of various grades and units of government with reference not only to population but also to wealth.

On applying the methods outlined above, the cost of all grades of government to the taxpayers of Minnesota, during 1911, was found to have been as indicated in the following table (p. 818). Items I and II refer to disbursements; items III and 4 (under D) to the burden borne by taxpayers. The essential difference between item III and item 4 is that the former includes the general property tax, federal taxes, gross earnings taxes, licenses, fees, and fines; while item 4 includes only the proceeds of the general property tax and federal taxes. Diagram 1 is based on item III of the table; diagram 2, on item 4.

The returns for individual cities given in the chapter on cost of government represent a consolidation of city accounts with those of school districts and, in many instances, with the transactions of independent municipal boards. Such consolidation presented difficulties owing to the fact that the school districts seldom exactly coincide with the municipality. In some cases a city contains three or four school districts. More often the district is larger than the city; and in some instances one district covers twenty or thirty townships and includes a considerable number of cities and villages. The object of such an arrangement is to compel outlying iron-ore lands to help maintain the schools. Wherever municipal and district boundaries were found not to coincide, the method of procedure was as follows: (1) to total the receipts and the payments of all school districts containing any part of the municipality; (2) to ascertain the assessed valuation of the district or districts, on the one hand, and the municipality on the other; (3) to obtain the ratio of municipal to district valuation; (4) to take the same per cent of the joint district receipts and payments respectively. The resulting sums indicate with substantial accuracy, it is believed, what was actually collected and spent within the city or village for both municipal and school purposes. The same plan was used in consolidating the outstanding debts and the annual interest charges of cities and districts.

Previous investigations have shown that, on the average, the cost of government increases faster than the size of the city. The same relation is also found to exist in Minnesota, as shown by

TABLE 1.—Cost of all grades of government, in 1911, to taxpayers of Minnesota. (Report of Minnesota Tax Commission, 1912, page 279.)

Items	Local	County	State	Federal ¹	All grades
A. Amount for each grade of government:					
I. Total payments (including duplications) . . .	\$47,518,000	\$41,787,000	\$16,598,000	\$21,759,000	\$127,664,000
II. Net " (excluding ") . . .	46,714,000	9,312,000	10,911,000	20,927,000	87,865,000
III. Cost to taxpayers (total coercive revenues) . . .	26,760,000	5,853,000	9,315,000	14,779,000	56,708,000
B. Per cent for each grade of government:					
I. Total payments (including duplications) . . .	37.2	32.7	13.0	17.1	100
II. Net " (excluding ") . . .	53.2	10.6	12.4	23.8	100
III. Cost to taxpayers (total coercive revenues) . . .	47.2	10.3	16.4	25.1	100
C. Per Capita for each grade of government: ²					
I. Total payments (including duplications) . . .	\$22.55	\$19.83	\$7.88	\$10.33	\$50.59
II. Net " (excluding ") . . .	22.17	4.42	5.18	9.93	41.70
III. Cost to taxpayers (total coercive revenues) . . .	12.70	2.78	4.42	7.01	26.91
D. Cost to taxpayers measured by area, true valuation, capitalistic income, and average family:					
1. Cost to taxpayers per square mile	\$330.95	\$72.39	\$115.21	\$182.78	\$701.33
2. Cost to taxpayers per \$10,000 true valuation . . .	71.71	15.69	24.96	39.61	151.97
3. Per cent which cost was of income from total wealth at 5% interest. ³	11.1	2.4	3.9	6.2	23.6
4. Cost to family of five on \$3,000 of real estate and \$1,000 of personal property (true valuation) under general property tax and federal taxes. ⁴	\$24.41	\$6.08	\$4.59	\$35.05	\$70.13

¹ Proportionate share of Minnesota on basis of population in 1910 (U. S. 91,972,266; Minnesota 2,075,708=2.257 per cent).

² Based on estimated population of 1911 (Table 1, ch. 15, Report of the Minnesota Tax Commission, 1912).

³ At average ratio of assessed to true valuation for real estate (31.41 per cent) and personal property (28 per cent) less exemption of \$100—\$1,182.30 assessed valuation, and average tax rate (29.67 mills) which prevailed in state in 1911, distributed as per state auditor's abstract of tax lists, viz.: state taxes 3.88 mills; county taxes, 5.14 mills; and local taxes, 20.65 mills.

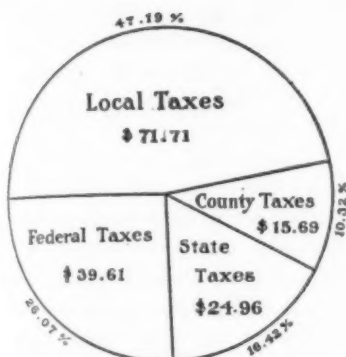


Diagram 1: Cost of all grades of government in 1911 to taxpayers of Minnesota, per \$10,000 of true valuation.

Total cost \$151.97.

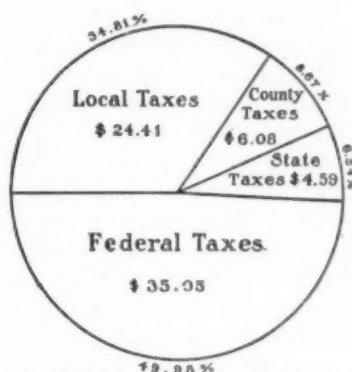


Diagram 2: Cost of all grades of government in 1911 to family of five in Minnesota, owning \$3,000 of real estate and \$1,000 of personal property, at average ratio of assessed to true valuation and average tax rate prevailing in the state. This diagram excludes state corporation taxes, licenses, fees and fines.

Total cost to family of five \$70.13.

Table 1 and diagrams 1 and 2 of course include only taxes received by the government, not the tribute paid to protected industries by consumers because of the protective tariff. How much this is cannot be ascertained. However, if such tribute bears approximately the same relation to the customs revenue of the government that the volume of domestic commerce does to the volume of foreign commerce (estimated at 12 to 1), then the family of five, represented in diagram 2, paid to protected interests \$168.44 against \$70.13 for the support of all grades of government. Any assumption of this sort is, of course, highly uncertain; but it may be noted that on this basis, the total burden borne by a family of five in Minnesota owning \$4,000 worth of property would amount to \$238.57; and that of this sum, 70.61 per cent would be for the support of protected industries.

the higher per capita cost in the larger cities. The explanation of this fact is presumably the greater number of things which the larger city does for the safety, health, and comfort of the citizen—things which in smaller municipalities are either done by the citizen himself or are not deemed necessary. It may be noted that an increasing cost per capita with increase of population is therefore not at all inconsistent with the assumption that municipal activities severally conform to the law of diminishing expense which would be expected to obtain in similar undertakings under private management.

On the other hand, it appears from this investigation that in Minnesota, at least, the cost of municipal government increases much less rapidly than wealth. In other words, while average cost per capita varies directly, average cost measured by true valuation varies inversely, with the population.

For example, in the three large cities in the state, the cost of city government (including schools) based on true valuation, varied inversely with size: being \$104.02 per \$10,000 true valuation in Minneapolis; \$110.16 per \$10,000 true valuation in St. Paul; \$112.68 per \$10,000 true valuation in Duluth. Maintenance charges for government in general and public service enterprises also varied inversely with the size of the city, being least in Minneapolis and greatest in Duluth. So likewise did total maintenance charges and interest, which constitute the expenditures for current government. The amount was, for Minneapolis, \$107.49, for St. Paul, \$123.57, and for Duluth, \$124.12 on each \$10,000 of true valuation.

Maintenance charges for health and sanitation, unlike maintenance in general, varied directly with size, the figures being \$9.62 for Minneapolis, \$8.86 for St. Paul, and \$4.63 for Duluth, on each \$10,000 of true valuation. A similar gradation exists on the basis of population, the per capita expenditures being \$1.59 in Minneapolis, \$1.20 in St. Paul, and \$0.79 in Duluth. Such striking variation of health and sanitation charges with the size of the city apparently testifies to the seriousness of the health problems which arise from the crowding together of a large population in a limited area.

It is, however, in the relation of average costs for the several classes of municipalities that the most significant facts appear, as shown by the table on the following page. Class 1 as here used includes Minneapolis, St. Paul, and Duluth; class 2, 17 cities and villages between 20,000 and 5,000 population; class 3, 23 cities and villages between 5,000 and 2,500; class 4, 89 cities and villages between 2,500 and 1,000; and class 5, 178 villages having less than 1,000 population. In all cases it was necessary to eliminate the mineral cities, since their huge valuations and high per capita costs would render all averages meaningless. True valuations were not calculated for class 5. The figures for this class consequently had to be gotten by various indirect methods and are therefore less reliable than those given for classes 1 to 4, inclusive.

The same relation of cost to size is thus found between the

TABLE 2.—Showing the average relation of size of city to cost of government in 310 cities and villages of Minnesota, excluding those having mineral valuations.

	Average Class 1	Average Class 2	Average Class 3	Average Class 4	Average Class 5
Cost to local taxpayers					
per \$10,000 true valuation	\$107.20	\$127.10	\$133.83	\$135.85	. . . . .
per capita	16.65	12.01	11.42	11.27	19.72
Payments for maintenance and interest					
per \$10,000 true valuation	\$114.94	\$158.90	\$192.08	\$190.25	. . . . .
per capita	17.86	15.03	16.39	15.79	213.42
Ratio of maintenance and interest to revenue	74.9	79.4	83.1	88.3	. . . . .
Receipts from public service enterprises					
per \$10,000 true valuation	\$15.37	\$34.95	\$63.24	\$45.44	. . . . .
per capita	2.39	3.30	6.40	3.77	0.97
Per cent of public service payments covered by receipts	86.2	88.0	81.6	72.6	67.4
Per cent of assessed to true valuation	38.77	32.79	30.92	30.17	. . . . .
True valuation per capita	\$1533.99	\$945.26	\$853.50	\$829.79	. . . . .
True tax rate (city and school)	9.36 mills	10.38 mills	9.66 mills	10.40 mills	. . . . .
Per cent of net debt to true valuation	3.6	2.9	3.4	3.1	. . . . .
Per cent of net interest to levy for city and schools	16.6	13.1	16.3	14.0	. . . . .

¹ Estimated. See page 382 (ch. 15), *Report of Minnesota Tax Commission, 1912*.

² Calculated from the per cent of maintenance and outlays for schools in class 4 and the figure (\$5.06) found for maintenance and interest in class 5, exclusive of schools.

several classes as between the three large cities. Cost per capita rises from \$11.27 in class 4 to \$16.65 in class 1; cost per \$10,000 of true valuation, on the other hand, decreases from \$135.85 in class 4 to \$107.20 in class 1. Moreover, there appears to be good reason for believing that more of personal property evades taxation in the larger than in the smaller cities; and since the true valuation used in this calculation takes account only of such personal property as actually reaches the tax rolls, the relative decrease of cost with increasing size of city, if measured by the true valuation of all property, would be much more rapid than the above figures indicate.

In like manner, payments for maintenance and interest decrease from \$190.25 in class 4 to \$114.94 in class 1, per \$10,000 of true valuation. The regularity of the gradation is, however, broken by class 3, which has \$192.08 against \$190.25 in class 4. This irregularity is due to the extraordinary extent to which municipalities in class 3 have gone into the management of public utilities, as shown by the receipts from public service enterprises.

The ratio of maintenance and interest to revenue decreases regularly from 88.3 per cent in class 4 to 74.9 per cent in class 1. Again, the per cent of payments for public service enterprises, which is covered by receipts from that source, is least (72.6) in class 4, and increases with the size of the city.² Both of these facts seem to indicate greater economy and efficiency of administration in the larger cities, and to suggest that the law of decreasing expense applies both to regular municipal activities and to the conduct of public utilities, precisely as would be expected under private management. It may be remarked, however, that the ratios given in the table do not allow for principal or interest of public service bonds. If these were included it is likely that the proportion of public service payments met by such receipts would not exceed 50 per cent, on the average, for all municipalities reported.

The ratio of assessed to true valuation rises from 30.17 per cent in class 4 to 38.77 per cent in class 1. But the true valuation per capita increases much faster, going from \$829.79 in class 4 to \$1,553.99 in class 1. As a result the true tax rate for municipal and school purposes is highest in class 4 and lowest in class 1. Class 2, however, is somewhat irregular, showing a higher true

² The ratio of 86.2 in class 1 against 88 in class 2 was due to very heavy outlays for the new filtration plant in Minneapolis and does not represent normal conditions.

tax rate and a lower ratio of debt to true valuation than size would lead one to expect. The apparent explanation is that cities of this class (20,000-5,000) have been compelled to face many of the same urban problems as the three large cities in class 1, though without resorting to as free a use of public credit.

The per cent of net debt to true valuation and the per cent of net interest to tax levy for city and school purposes are higher in the larger than in the smaller cities, with only the irregularity just noted as to class 2. So far as it goes, this fact of course tends to offset the lower cost of government to present taxpayers in the larger municipalities.

So many and such striking variations with size convey a tantalizing suggestion of some regular relation, capable of mathematical formulation, between population, true valuation, and cost of government. The method of empirical curves cannot be used successfully owing to the great gap between classes 1 and 2. The ratio plan yields the results indicated in table 3.

According to table 3, the per capita cost of government increased 8.08 cents for each 1,000 additional population, between classes 4 and 3 (1,570 to 3,427 population); 11.67 cents between classes 3 and 2 (3,427 to 8,483 population); and 2.37 cents between classes 2 and 1 (8,483 to 204,068 population): the weighted average of the three amounts being 2.65 cents.³ These amounts translated into per cents become respectively 0.717, 1.022, and 0.197; the weighted average of the three rates being 0.222 per cent. In view, however, of the fact that an increase of 1,000 in population imposes a much greater strain on a small than on a large municipality, a proportional plan seems likely to be more nearly accurate. On this basis, each 10 per cent increase in population involved an increase in per capita cost of government of 1.27 cents between classes 4 and 3, 4 cents between classes 3 and 2, and 2.01 cents between classes 2 and 1; the weighted average being 2.09 cents. Stated as rates, these increases become respectively 0.113, 0.350, and 0.167 per cent; the weighted average of the three rates being 0.175 per cent.

³ Owing to the great difference in the intervals separating the several classes of municipalities, a simple average of the increases in cost for each 1,000 additional population would have little significance. The average given (2.65 cents) is therefore calculated by weighting the several rates of increase in proportion to the extent of the intervals over which such rates apply: that is, using 8.08 cents .857 times, 11.67 cents 5.056 times, etc. The same principle is followed in calculating the other weighted averages in this table.

TABLE 3.—Effect of size of city on true valuation and on cost of municipal government, in Minnesota, fiscal year 1911.

	Class 4 ¹	Class 3 ²	Class 2 ³	Class 1	Totals	Averages
I. Number of municipalities included ⁴	89	23	17	3	132	33
II. Total population, 1911.....	139,696	73,814	144,209	612,205	974,914	7,386
III. Total population of municipalities, 1911.....	139,696	73,814	144,209	612,205	974,914	7,386
IV. Total population of cities, 1911.....	\$115,910,740.00	\$67,297,424.00	\$108,313,557.00	\$351,361,496.00	\$1,270,855,131.00	
V. Total cost of government, 1911 ⁵	\$1,574,661.13	\$800,245.02	\$1,732,597.32	\$10,198,466.49	\$14,303,603.96	
VI. Cost per capita ⁶	\$11.27	\$11.42	\$12.01	\$16.65		\$14.78
Increase in cost per capita.....		\$0.15	\$0.59	\$4.64	\$5.38 ⁷	
(1) for each 1,000 population.....		\$0.15	\$0.59	\$4.64	\$5.38 ⁷	
(a) amount of increase in cost ⁸		\$0.0698	\$0.1167	\$0.0237		\$0.0205
(b) per cent increase in cost ⁹		0.717	1.022	0.197		0.222
(2) per 10 per cent increase in population.....		\$0.0127	\$0.0400	\$0.0201		0.0209
(a) amount of increase in cost ⁸		0.113	0.350	0.167		0.175
(b) per cent of increase in cost ⁹						
VII. True valuation per capita ⁶	\$529.79	\$853.50	\$945.20	\$1553.99		\$1303.56
Increase in true valuation per capita.....		\$323.71	\$419.76	\$698.73	\$724.20 ⁷	
(1) for each 1000 population.....		\$323.71	\$419.76	\$698.73	\$724.20 ⁷	
(a) amount of increase in valuation ⁸		\$12.77	\$18.15	\$3.11		\$3.57
(b) per 10 per cent increase in valuation ⁹		1.589	2.127	0.329		0.385
(2) per 10 per cent increase in population.....		\$2.00	\$3.22	\$2.64		\$2.82
(a) amount of increase in valuation ⁸		0.241	0.729	0.279		0.303
(b) per cent of increase in valuation ⁹						
VIII. Ratio between ratios of increase in cost per capita and increase in true valuation per capita.....						
(1) for each 1000 population ¹⁰		46.59	48.05	56.88		57.66
(2) per 10 per cent increase in population ¹¹		46.47	48.01	56.86		57.76
IX. Cost per \$10,000 true valuation ⁶	\$135.85	\$136.83	\$127.10	\$107.20	\$28.63 ¹²	
Decrease in cost per \$10,000 true valuation.....		\$2.02	\$6.73	\$19.10		
(1) for each 1000 population.....		\$2.02	\$6.73	\$19.10		
(a) amount of decrease in cost ⁸		\$1.09	\$1.53	\$0.10		\$0.14
(b) per 10 per cent decrease in cost ⁹		0.502	0.994	0.070		0.108
(2) per 10 per cent increase in population.....		\$0.17	\$0.46	\$0.09		\$0.11
(a) amount of decrease in cost ⁸		0.125	0.344	0.071		0.089
(b) per cent of decrease in cost ⁹						

¹ Excluding the mineral towns.
² Weighted in proportion to the intervals between classes.
³ From analysis table K, *Report of Minnesota Tax Commission*, 1912.
⁴ From analysis table J, *ibid.*
⁵ From table 2, *ibid.*
⁶ The ratio of VI (1) to VII (1) b.
⁷ The ratio of VI (2) to VII (2) b.
⁸ Total increase between classes 4 and 1.
⁹ Total decrease between classes 4 and 1.

It is perhaps significant that the rate of increase in per capita cost for each 10 per cent increase in population rises from 1.27 cents between classes 4 and 3 to 4 cents between classes 3 and 2, and declines again to 2.01 cents between classes 2 and 1. This sharp upward turn in the per capita cost of municipal government is no doubt due to the first contact with true urban problems; and it presumably extends considerably beyond the 8,483 size, though the enormous gap between classes 2 and 1 in Minnesota (8,483 to 204,068) prevents a definite solution of this problem. That this upward "bulge" extends even beyond the 30,000 size, however, is indicated by the fact that group IV, as reported by the Census Bureau, shows a per capita cost slightly higher than group III. In view of this high rate of increase during the first part of the interval, and the fact that the average increase between classes 2 and 1 is only 2.01 cents, it follows that the rate of increase must fall below 2.01 beyond 100,000 population, and probably approaches 1 cent increase per capita for each 10 per cent increase in population, as the 200,000 size is approached. Corroborative evidence on this point is found in the rate of 1.356 cents between groups III and II (70,829 to 159,632 population) as reported by the census for 1910 (table 4).

This decreasing rate of increase in the per capita cost of municipal government, in spite of constant expansion of municipal functions with increase of population, would seem to suggest that municipal activities obey the law of diminishing expense or increasing returns.

Using the same methods, the true valuation per capita is found to increase for each 10 per cent increase in population \$2.00 or 0.241 per cent between classes 4 and 3; \$6.22 or 0.729 per cent between classes 3 and 2; \$2.64 or 0.279 per cent between classes 2 and 1. Here again, as in the case of per capita costs, the transition to true urban conditions is marked by a sharp rise in the rate of increase; but this rise is more pronounced in true valuation than in per capita costs. On the average, for all classes, each 10 per cent increase in population is marked by an increase of \$2.82 or 0.303 per cent in true valuation per capita.

Comparing these several rates of increase (part VIII, table 3), it appears that for each 10 per cent increase in population, the increase of per capita cost averaged only 57.76 per cent of the increase in true valuation of property actually listed on the tax rolls. In other words, allowing for property not listed, it is safe to say that per capita wealth in Minnesota increases from small

to large cities, approximately twice as fast as per capita cost of municipal government.

It should be noted, however, that while between classes 4 and 3 the per capita cost increases only 46.47 per cent as fast as the per capita valuation, the corresponding rate of increase is higher the larger the municipalities, being 59.86 per cent between classes 2 and 1. This fact may indicate that cost of government tends to overhaul true valuation in the largest urban centers. On this account, as well as for many other reasons, it is greatly to be desired that the Census Bureau should form a separate group of the great cities—say those in the million class—so that the analysis of the relation of cost of government to population and wealth may be made more complete.

In view of these different rates of increase of cost and valuation, the cost of municipal government measured by true valuation necessarily decreases as the population increases. The decrease in cost on each \$10,000 of true valuation is \$2.02 between classes 4 and 3, \$6.73 between classes 3 and 2, and \$19.90 between classes 2 and 1. These amounts are equivalent to a decrease for each 10 per cent increase in population, of \$0.17 or 0.125 per cent between classes 4 and 3; \$0.46 or 0.344 per cent between classes 3 and 2; and \$0.09 or 0.071 per cent between classes 2 and 1. The weighted average decrease in cost of government, measured by true valuation, was thus \$0.11 or 0.089 per cent for each 10 per cent increase in population. Between classes 3 and 2, where the increase in per capita cost is most marked, the decrease in cost measured by true valuation is still more pronounced because it is precisely at this point that the true valuation rises most rapidly. The coming of distinctly urban conditions, which impose new burdens on municipal governments, thus augments property values so greatly that the new burdens are borne more easily than the old.

By way of summary it may be pointed out that each increase of 10 per cent in population in the cities and villages of Minnesota, on the average, is accompanied by the following changes stated on the per capita basis:

	Amount of change	Per cent of change
	Cents	
Increase in cost	2.09	0.175
Increase in true valuation	2.82	0.303
Decrease in cost per \$10,000 true valuation	11.00	0.089

Groups, IV, III, and II of the census classification are intermediate as to average size between class 2 and class 1 in Minnesota (table 3). They are also intermediate in cost per capita, as appears from the following tabulation:

Table 4.—*Per capita cost of government.*

Class or group	Average population	Per capita cost
Class 4, Minnesota	1,570	\$11.27
Class 3, "	3,427	11.42
Class 2, "	8,483	12.01
Group IV, United States	37,805	13.02
Group III, " "	70,829	13.00
Group II, " "	159,632	14.70
Class 1, Minnesota	204,068	16.65
Group I, United States	844,106	23.85

For the sake of comparison, a table is here presented, based on the 1910 census, of all cities in the United States having over 30,000 population. Group IV includes 75 cities between 30,000 and 50,000 population; group III, 59 cities between 50,000 and 100,000; group II, 32 cities between 100,000 and 300,000; and group I, 18 cities over 300,000 population.

The federal groups, like the classes in Minnesota, show an increase in per capita cost with size of city except between groups IV and III. This irregularity, like the one noted in table 3, suggests that there may be certain sizes which call for a new and more expensive type of municipal plant and administration—in other words, which temporarily bring into operation the law of increasing expense; and that thereafter, with continued increase of size, the economy of large-scale operation again makes itself felt to the extent of checking, temporarily, the increase of per capita cost and presumably causing a sharp drop in the cost measured by true valuation.

Again, the increase in per capita cost between groups III and II (item VI (2) under group II, table 5) is 13.56 cents or 1.043 per cent, corresponding closely to the rate suggested by the Minnesota figures for cities of this size; while between groups II and I, the increase in per capita cost is 21.34 cents or 1.452 per cent. This fact suggests that just as the interval between class 3 and class 2 marking the transition to urban conditions is signalized by

TABLE 5.—*Showing effect of size of city on true valuation and on cost of municipal government in the United States, in 1910, using the ratios established for Minnesota.*

	Group IV	Group III	Group II	Group I	Totals	Averages
I. Number of municipalities in group ¹	75	50	32	18	184	46
II. Total population, 1910 ²	2,835,334	4,178,915	5,108,257	15,163,901	27,316,407	148,450
III. Average population, 1910.....	37,805	70,859	159,632	844,106		
IV. Total cost of government, 1910 ³	\$38,068,870	\$54,397,265	\$73,196,101	\$92,320,557	\$328,742,829	
V. Total cost per capita ⁴	\$13.02	\$13.00	\$14.70	\$23.85		19.35
VI. Increase in cost per capita.....						
(1) for each 1,000 population.....			\$1.70	\$0.15	\$0.35	
(a) amount of increase in cost ⁵			\$0.0191	\$0.0131		0.0138
(b) per cent of increase in cost ⁶			0.147	0.089		0.093
(2) per 10 per cent increase in population.....						
(a) amount of increase in cost ⁵			\$0.1336	\$0.2134		\$0.1958
(b) per cent of increase in cost ⁶			1.043	1.452		1.359
VII. True valuation per capita ⁷						
Increase in true valuation per capita.....						
(1) for each 1,000 population.....	\$1,056.45	\$1,139.16	\$1,415.83	\$3,544.06	\$2,507.61	\$2,517.79 ⁸
(a) amount of increase in valuation ⁹		\$102.71	\$276.17	\$1,128.73		
(b) per cent of increase in valuation ¹⁰		\$3.11	\$3.11	\$3.11		\$3.11
(2) per 10 per cent increase in valuation ¹¹		0.390	0.273	0.230		0.229
(a) amount of increase in valuation ⁹		\$11.76	\$22.04	\$9.64		\$39.09
(b) per cent of increase in valuation ¹⁰		1.153	1.934	3.507		2.878
VIII. Ratio between ratios of increase in cost per capita and increase in true valuation per capita.....						
(1) for each 1,000 population.....						
(2) per 10 per cent increase in population.....						
IX. Cost per \$10,000 true valuation ¹²						
Decrease in cost per \$10,000 true valuation.....	\$123.17					41.79 ¹³
(1) for each 1,000 population.....						47.25 ¹⁴
(a) amount of decrease in cost ¹⁵						\$76.87 ¹⁶
(b) per cent of decrease in cost ¹⁶						
(2) per 10 per cent increase in population.....						
(a) amount of decrease in cost ¹⁵						
(b) per cent of decrease in cost ¹⁶						

¹ From table 1, *Census Report on Financial Statistics of Cities over \$0,000 in 1910*.

² From table 2, *ibid.*, including taxes, licenses and permits, fines, etc.

³ From table 25, *ibid.*, same report and items as ².

⁴ Weighted in proportion to the intervals between groups.

⁵ Based on rate of increase in true valuation established between groups.

⁶ Same size as in class 2, table 3.

⁷ The total true valuation of the four groups, calculated as under ⁵, divided by the total population.

⁸ See table 3, footnotes ⁷ and ⁹.

⁹ The total cost for the 4 groups divided by the total true valuation, obtained according to footnote ⁵.

same size as in class 2, table 3.

¹⁰ The total true valuation of the four groups, calculated as under ⁵, divided by the total population.

¹¹ See table 3, footnotes ⁷ and ⁹.

¹² The total cost for the 4 groups divided by the total true valuation, obtained according to footnote ⁵.

¹³ From table 1, *Census Report on Financial Statistics of Cities over \$0,000 in 1910*.

¹⁴ From table 2, *ibid.*, including taxes, licenses and permits, fines, etc.

¹⁵ From table 25, *ibid.*, same report and items as ².

¹⁶ Weighted in proportion to the intervals between groups.

a sharp rise, this still more striking rise in per capita cost is due to the transition from ordinary urban to metropolitan conditions, which again imposes the necessity of providing a more expensive type of municipal plant and administration.

The question arises: Since the census figures for per capita cost in cities over 30,000 correspond so closely to the results in Minnesota that both sets of figures can be arranged in a single ascending series (table 4), are we warranted in assuming that true valuation in these cities outstrips the per capita cost as much as it does in Minnesota? If so, it would follow that the cost of government measured by true valuation would show a corresponding decrease. In order to bring out the effects of such a variation of true valuation with size, sections VII, VIII, IX of table 5 have been prepared. These figures, which are printed in italics to indicate that they are purely hypothetical, are based on the per capita valuation shown for class 2 and the rate of increase between class 2 and class 1 in table 3. According to these figures, there would be for each 10 per cent increase in population a decrease of \$0.38 or 0.306 per cent between groups IV and III; of \$0.71, or 0.587 per cent, between groups III and II; and of \$1.60, or 1.429 per cent, between groups II and I, in the cost of municipal government resting on each \$10,000 of true valuation. If the cities of over 1,000,000 population were put in a separate group, this decrease in cost measured by true valuation would run to highly significant and even startling figures; unless, indeed, cost of government overhauls true valuation.

In the absence of statistical corroboration as to the true valuations outside of Minnesota, it is not safe to place overmuch confidence in this portion of table 5, especially in so far as concerns group I. For this reason, these figures are published less as a solution than as a statement of the problem. If several of the states which employ the sales method of valuing real estate for purposes of taxation should calculate and publish true valuations by municipalities, and if the Census Bureau should make a separate group of the cities of over 1,000,000 population, it would be possible to draw curves showing the average relation of per capita cost, true valuation, and cost measured by true valuation, for each size of municipality. Such a result would certainly be of great interest and value, both theoretical and practical. It is, of course, possible that such statistical data would reveal some size of city which gives the maximum of efficiency, or of true valuation

per capita; but if such is the case, it must be somewhere in group I. On the whole, and barring this possibility, the Minnesota figures seem to show that as cities grow larger, wealth increases practically twice as fast, on the average, as the per capita cost of municipal government.

In a sense, this conclusion is reassuring, but it suggests that this economic advantage tends constantly to make the great city greater still. Certainly the Minnesota figures give no support to the theory that increasing cost of city government will set a limit to the continued and ever increasing congestion of population in urban centers, which imposes the necessity of human adaptation to what is, in effect, a wholly new environment.

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THE EXPRESS CHARGES PRESCRIBED BY THE INTERSTATE COMMERCE COMMISSION

In an earlier article,¹ the writer described the more important objects of complaint against the rates and practices of express companies that have prevailed heretofore; stated the remedial changes, reached in some cases with the coöperation of the companies, that are applicable to the practices and methods of handling the traffic; discussed more fully the arguments urged in support of the complaints against the present classification, rates, and charges; and stated the general plan proposed by the Interstate Commerce Commission for dealing with these complaints. Because, at the time of writing, the case was not closed before the commission, a discussion of the specific schedule of charges proposed by the commission and the specific criticism of that schedule on the part of express companies and shippers was left until a later time. The case has now been finished and the commission has given its decision, under date of July 24, 1913.²

The schedule prescribed by the commission, effective October 15, is a complete revision of the whole structure of express rates. The commission went to this length because, in its opinion, the interdependence of all rates and charges stood in the way of satisfactory relief from the rates complained of without a readjustment of the whole schedule.³

Basis of Interstate Commerce Commission's Rate Schedule

It becomes at once a matter of considerable interest to know upon what basis or principle the commission proceeded in constructing its brand-new structure of charges. The commission considered a number of bases that have been urged, including:

(1) The return on the investment; (2) the capitalization of the companies; (3) the earnings; (4) the operating expenses; (5) first-class freight rates; (6) passenger rates. In addition, the commission endeavored to reach some common understanding in this matter with the express companies.

¹"The Rates and Practices of Express Companies," *AMERICAN ECONOMIC REVIEW*, vol. III (June, 1913), pp. 314-340.

²"In the Matter of Express Rates, Practices, Accounts, and Revenues," 28 *Interstate Commerce Commission Reports*, p. 131.

³24 *Interstate Commerce Commission Reports*, pp. 433-434.

The conferences developed, however, that no common ground could be found owing to the impossibility of acceptance by the commission of the percentage contracts between the express companies and the rail carriers as making a legal or moral necessity for higher rates than could be justified otherwise.⁴

The companies press their contention in this matter, because of the bearing of the percentage form of railway compensation on the express companies' revenue from shipments weighing less than 100 pounds. This is explained by the commission thus:

While such packages must have rates based upon weight, yet as they move as separate shipments with individual pick-up and delivery service, each must pay for such service as an individual shipment. The amount of such service varies but slightly with the weight of the package and not at all with the length of its rail journey. It is entirely performed by the express carrier, yet the demand is that shippers shall be compelled to pay upon such packages rates sufficiently high to yield to the express carrier, out of a division ranging from 35 per cent to 60 per cent, an amount sufficient to compensate it. Every addition to the rates paid by the shipper for such service as distinguished from the line haul is cut in two by the contracts and must be approximately doubled if the express carrier is to be compensated.

Likewise, in the case of rates for long distances, the service performed by the rail carrier, especially on shipments of large weight, is relatively much greater than that performed by the express company. As to these rates, the contention is that full compensation for the rail carrier must be found in half or less than half thereof.⁵

The commission's inquiries in this matter led to no satisfying principle upon which to construct its completely new rate structure. The commission expresses the judgment that there is no one test of reasonableness. But it gives its conclusions as follows:

(1) That express rates should be made primarily to meet the need of the great body of our people and should therefore be stated in terms that represent the small packages which the express company is intended to carry rather than by the 100 pounds as freight rates are stated.

(2) That in the fixing of its rates an express company should not be allowed to charge more than a railroad company if the latter undertook to, and did, give the same service.

(3) That it is proper for the government to treat the express company as a freight forwarder by passenger train, giving supplemental service at each terminus, and intermediate care.

(4) That an express rate may not be based upon the monopoly right of the express company to be the exclusive freight forwarder over one or more lines of railroad.

⁴ 28 *Interstate Commerce Commission Reports*, p. 140.

⁵ *Ibid.*, p. 141.

(5) That the rates should not include more than a reasonable compensation for the service given, even though such compensation falls below that which the railroad exacts as a minimum for the carrying of 100 pounds of freight.

(6) That it is unreasonable to fix as rapid a decline in express rates for long distances as is made by the railroads in their freight rates, express service in this respect being more analogous to passenger than to freight service.

(7) That in compounding the express rates the railroads should be allowed a compensation for bulked freight moved upon a passenger train as to which it is relieved by contract from all liability for loss or damage and is without expense for the furnishing of a receipt, the billing, the bookkeeping, and a great number of other general expenses.

(8) That the rates should include a return to the express company which will compensate it with profit for the expense of the service which it gives, there being added thereto in the formation of the total rate the proper charge which it may reasonably make for the service which the railroad gives, as stated in the preceding paragraph.⁶

Method of Constructing the Commission's Rates

In view of the rather indefinite results of the search for a basis of rate making, it is of considerable interest to know just how the commission proceeded in preparing the schedule prescribed by it. It is clear from an analysis of the schedule itself that the charges are computed in some regular manner. But the commission does not publish in its opinion any description of its process, nor does it indicate the relative weight given to different considerations in making up its charges. However, in the response of the express companies on October 9, 1912, to the commission's order of June 8, the five leading companies say:

The commission has advised these respondents that the rates it has proposed have been arrived at upon the following basis:

The rate for a package of any weight is based upon an arbitrary allowance of 20 cents for the handling of the package by the express company or companies, regardless of the weight of the package, plus an additional charge which varies directly with the weight of the package. This additional charge is made up on the basis of a charge per 100 pounds, which is composed of an arbitrary of 25 cents per 100 pounds on account of service, such as use of stations, express messengers, risk and administration expenses, plus a haulage charge which varies with distance. For example, for a package weighing 100 pounds, the total rate is the arbitrary of 20 cents for the package, plus the arbitrary of 25 cents per 100 pounds, plus a haulage charge per 100 pounds for the distance the package is carried. . . . In zone 4

⁶ 24 *Interstate Commerce Commission Reports*, pp. 431-432.

the arbitrary per 100 pounds is understood to be 55 cents instead of 25 cents.⁷

In determining the allowance for haulage, the commission took account of the differences in those conditions in different parts of the country that affect the cost of transportation, and distinguished five sections, which it designates as "zones," as follows:

These subdivisions conform generally to those recognized by the rail carriers and which this commission has, in the consideration of freight rates, been led to believe were based upon actual differences in operating and traffic conditions. . . . Zone I, as it is called, is the territory north of the Ohio and the Potomac and east of the Mississippi, in which there generally obtains a lower grade of freight rates and passenger rates and express rates than elsewhere throughout the United States, and in which the population is most dense and traffic most abundant. Below this zone lies Zone II. To the west of the Mississippi lies Zone III, which generally takes slightly higher rates than the southern territory. This zone includes the upper peninsula of Michigan, as well as a portion of Wisconsin, because the conditions in these territories more nearly meet those immediately west of the Mississippi River than the conditions obtaining in the territory immediately adjacent in Zone I. To the west of Zone III, which extends as far as Denver, lies the great intermountain country, which as yet is but sparsely populated and as to which rates distinctly higher than the rates obtaining in any of the eastern territories should be made. The belt of states running along the Pacific Coast has been set apart as Zone V, conditions therein being different from those found in any of the other zones, their population being more dense and their conditions of transportation, all things considered, less expensive than in the zone immediately to the east.⁸

In general, the allowance for haulage is based on distance as measured in units of 50 miles along the shortest rail route, but with a slightly decreasing rate for the longer distances. Thus, according to the response of the five leading companies above cited,⁹ for a haul of 50 miles, the allowance in zone 1 is 15 cents per 100 pounds. For a haul of 100 miles, the rate for each "block" of 50 miles is reduced $\frac{1}{4}$ cent; for a haul of 150 miles, the reduction is $\frac{1}{2}$ cent; and so on until the reduction amounts to 5 cents. Stated another way, for each additional 50 miles added to the length of the haul, the rate per 100 pounds for each 50 miles is reduced $\frac{1}{4}$ cent until the distance amounts to 1,000 miles. For

⁷ Response of Adams Express Co., American Express Co., Southern Express Co., United States Express Co., and Wells Fargo & Co. to the commission's order of June 8, 1912, made on October 9, 1912, p. 13.

⁸ 24 *Interstate Commerce Commission Reports*, pp. 430-431.

⁹ Appendix B, p. 28.

hauls of over 1,000 miles, the allowance per 100 pounds for each 50 miles remains unchanged until distances of 1,750 miles or over are reached. Then a reduction of 1 per cent is made for each 2 blocks, *i.e.*, every 100 miles or fraction thereof over 1,750 miles, until distances of 2,950 miles or over are reached, when the reduction amounts to 12 per cent. No further reduction is made for distances beyond 2,950 miles, or 59 blocks of 50 miles each.

While this plan for reducing the proportionate amount allowed for haulage as the distance increases is the same for all zones, the basic allowance for one block, or 50 miles, is different for different zones. In zone I it is 15 cents, decreasing to 10 cents; for zone II it is 20 cents, decreasing to 15 cents; for zones III and V it is 24 cents, decreasing to 19 cents; for zone IV it is 28 cents, decreasing to 23 cents. When the shipment is to be carried over part or all of two or more zones, the rate is the sum of elements computed for each zone. Each of these elements is the mileage proportion of what the rate would be for the entire distance within that zone.

This somewhat complex composition of the charges may be recapitulated thus:

For collection, delivery, and other expenses at the terminals, 20 cents per package.

For use of stations, express messengers, risk and administration expenses, 25 cents per 100 pounds.

For haulage, a charge per 100 pounds that diminishes slightly as the distance increases and differs in different sections of the country.

The Argument on the Commission's Methods of Constructing Rates

The express companies criticized the commission's schedule in two main respects: (1) the commission's plan of constructing the rates, and (2) the effect of the commission's schedule, as constructed, upon their earnings. On the method of constructing charges the analysis is minute and critical. Only the most significant points raised by the companies will be considered here.

The companies dispute the adequacy, in turn, of each of the allowances made by the commission for the several elements in the charge. The principal item of expense, aside from the cost of railway transportation, is what the companies designate terminal expenses. They object that the commission's allowance for this is

based on an underestimate, and they base their objection in part on their understanding that the commission depended upon data collected by the Adams Express Company for the years 1904-1907 for a limited number of offices. The companies state that these data omit important items, and that there is no evidence to show that this earlier experience of the Adams company is typical. The companies base their objection, further, on the ground that the commission's estimate from past experience, whatever its basic data, makes no allowance for the increase in costs that the companies assert must be expected in view of the steady increase of operating expenses in recent years.

The shippers answer this objection with deductions drawn from data in the record of the hearings. It is computed that the total operating expense, aside from payment to the railways, but "including the full proportion of taxes and interest at 7 per cent per annum on the company's property," was, for the Adams company, on August 18, 1909, 19.68 cents per piece; and for the United States company, on December 22, 1909, it was 12.72 cents per piece.¹⁰ Since the data for the Adams company were compiled for a time of year when the proportion of heavier shipments is greatest, and the data for the United States company at a time when the proportion of light-weight shipments is greatest, these averages per piece might be assumed to represent closely the limits between which lies the yearly average cost per piece, aside from expense to the railways.

From returns for 11 companies in 1909, representing 98.9 per cent of the total revenue from express freight received by all 14 companies operating that year, it appears that the average operating expense per piece for all 11 companies, for the three months of April, August, and December, 1909, was 20.52 cents. To this should be added taxes amounting to one third of a cent, making a total average expense to the companies for operation (aside from the payments to the railways) and taxes of 20.85 cents per piece.¹¹

Another computation made by the shippers on the basis of data reported by the American Express Company to the commission indicates that the part of operating expenses designated as terminal expense averaged, for the year ended June 30, 1911, between 13 and 15 cents per piece.¹²

¹⁰ *Brief for Express Rates Conference*, p. 45.

¹¹ *First Annual Report on the Statistics of Express Companies, for the Fiscal Year 1909*, p. 19.

¹² *Brief for Express Rates Conference*, p. 46.

Further citation is made by the shippers from the statistics of the cost of delivery for department stores in 17 cities in different parts of the United States. The average cost per package for these deliveries ranged from 4 to 7.47 cents, the latter being in Manhattan borough, New York city. On this basis, the cost of both collection and delivery would not be double these figures because collections are made along with deliveries. Yet, in any case these data do not indicate the necessary terminal expenses of express companies, because the collection and delivery of shipments is only part of the work that must be performed on express shipments at the terminals.

This controversy is confused by a failure to separate two distinct points in dispute. One question is whether the charge covers the actual expense incurred by express companies; the other is whether it covers what critics of operating expenses may consider the expense of the companies ought to be. As to the first question, there has been no pointed inquiry concerning the average actual expense per piece or per shipment for a number of companies for a considerable period. Such an inquiry would be embarrassed by the difficulty of apportioning many joint expenses so as to determine the actual expense for collection and delivery, for other terminal service, and the like. The most comprehensive information is that above quoted for 11 companies for three months in 1909. But this is the expense as reported by the companies and probably includes elements of cost not properly chargeable to transportation of express matter. However, such data as are available point to the adequacy of the commission's allowance. The commission allowed 20 cents per package for terminal expense and 25 cents per 100 pounds for other costs excepting haulage. The average weight of express pieces is about 33 pounds. That would make an allowance of 20 cents plus about 8 cents, or 28 cents per package for all operating costs aside from railway expense for transportation. This 8 cents applies in part to expenses of the railways in providing terminal accommodations for the express companies; but, even allowing for that, the charge would be ample to cover the average cost per piece according to the data already quoted. Of course, the 8 cents per package of average weight becomes practically nothing for each of the numerous packages of small weight. But the average expense for these, as indicated by the comparative expense of the Adams and the United States companies above cited, is less than for the package of average weight.

The companies also criticize the schedule with respect to the distribution, among shipments of different weights and classes of traffic, of the burden of providing for the aggregate cost of the service and for a profit. The commission had objected to the graduated charges of the companies as without any determinable logical relation to each other and as so arbitrarily made as to put upon the smaller packages an undue proportion of the burden of the cost of transportation. The commission's graduated scales were prepared to meet both of these objections. But the companies criticize the new scales on the ground that, while reducing the burden on the small packages, they make no other provision for bearing it, and thus would cause a loss of revenue of \$15,000,000 on present business on this account alone. This the companies regard as a "conclusive demonstration that the burden of the cost of transportation is not, generally speaking, misplaced at present, because unless it is so placed, it cannot be placed anywhere."¹³

The force of this criticism by the companies depends largely on how the reduction of charges will affect the volume of traffic in these small packages, and, thereby, the cost of handling them. If there should be an appreciable increase in this traffic without a corresponding increase in operating expenses, the loss of revenue would not be experienced and the reduction of the proportionate burden on the smaller packages would be free from the companies' criticism.

Further criticism of the commission's method of constructing rates concerns matters of public policy. The rates, it is complained, "upset long-established traffic conditions" that have developed under rates adjusted to the necessities of traffic. This criticism, of course, depends upon the prior question whether rates for an express transportation service should materially depart from uniformity in order to suit special local and industrial situations. Again, the companies criticize the commission's rates per 100 pounds because they

afford repeated instances of a disregard of the principle of the statutory prohibition [of the discredited long and short haul practice] and also of a disregard of the principles upon which the commission, upon application of the carriers, has made exceptions, and because, indeed, the factors employed in the formula

¹³ *Brief for Five Leading Companies*, p. 57.

compel violations of the long and short haul principle. For example, in Zone I, under the sub-block formula, the rate from a place in the extreme southeast of one main block to a place in the extreme northwest of the next main block to the west must be 90 cents, whereas to the nearest places in the next main block still further west the rate can be only 75 cents. The same situation arises in all other zones with respect to places similarly situated.¹⁴

Another criticism by the companies is that, in some cases, the commission's rates, and in frequent cases, the haulage proportion of the rates, is lower than the first-class freight rate. From the examples cited by the companies, it would appear that this situation is probably due to exceptionally high freight rates made to meet exceptional conditions of traffic or cost of transportation. In such cases, the commission's rates may be defended on the ground that public policy is opposed to an adjustment of express rates to local and market conditions to the same degree as freight rates. But there remains the practical consideration that such situations as the companies cite will tend to transfer all first-class freight from the freight service to the express service. This raises another question of public policy as to whether all first-class freight between these points should be carried by express service. However, the volume of traffic concerned in these cases is probably very small.

Another criticism much emphasized by the companies is directed at the practicability of the commission's minute gradation of charges according to weight and distance.¹⁵ The effect of this feature of the commission's schedule is to increase the number of different charges in the graduate scales from 1,281, as found in the companies' scales, to 28,940. That is, on the

¹⁴ *Brief for Five Leading Companies*, p. 49.

¹⁵ The companies' rates per 100 pounds, on which their graduate table is based, increase by 10 cents or 15 cents up to \$2, then by 25 cents up to \$5, and by 50 cents when over \$5. In all there are only 54 different base rates per 100 pounds. But the commission's schedule grades the 100-pound rates, from the lowest to the highest, by increases of five cents. This creates 294 different rates in place of only 54. Further, under each of the companies' base rates there are only from 10 to 20 different charges for packages ranging from 1 pound to 100 pounds. But the commission's graduate scales aim to adjust the charge to each increase of 1 pound between those limits. Except in a few instances, where the charge is the same for different weights in order to avoid fractions of a cent, the commission's charges increase with each increase in weight of 1 pound. Hence, instead of having not more than 20 different charges, under any one base-rate, the commission's scales have, in most cases, as many as 100 different charges.

average, for each charge in the companies' graduate scales the commission substitutes about 23. The significance of these changes is that they increase the number of different charges that must be carried in memory, so as to be at instant command, by the clerks who assess the charges on the way-bills.¹⁶ Therefore, either these clerks will make more errors in billing or else they will have to take time much more frequently to consult the printed schedule of charges. This, of course, will reduce the speed of the clerks in getting express matter dispatched with promptness. The loss of speed might be avoided, in part at least, by employing a large number of clerks. But that would involve an appreciable increase in terminal expenses per package. Indeed, the companies contend, such increase in expense would result even if no more clerks were employed. For the number of pieces each clerk can handle under the commission's schedule of charges would be reduced.

Argument on the Effect of the Commission's Schedule: Revenues

While many of the points raised by the companies against the commission's method of determining charges are important, the crux of the issue is the collective effect of the charges on the companies' earnings. As to this, the companies claimed that their revenue would be disastrously reduced. The commission directed the companies to apply the proposed rates to some one or more day's business and report the effect the proposed rates would have upon the revenues from that business. The companies all selected October 23, 1912, for this test. The five leading companies found that the revenue would have been reduced 18.25 per cent.¹⁷ This would amount to \$26,027,341 on the basis of the gross revenues for the year ended June 30, 1912. Or, applying the same

¹⁶ The bulk of express traffic originates at the large cities, where the major part of it is delivered to the companies late in the afternoon for dispatch on evening trains. The sorting of the flood of packages according to their destination, and the making out of a way-bill with the charge for each shipment, has to be done under great pressure for time. Special clerks are assigned to the billing of shipments. And each of these clerks is assigned to shipments for some particular restricted territory in order that he may not need to be familiar with more than a limited number of different charges, which soon become fixed in his memory. Under the commission's schedule, the greater number of different charges will make it more difficult for bill clerks to carry the charges in mind with certainty.

¹⁷ *Brief for Five Leading Companies*, p. 81

percentage to the gross revenues of all nine respondent companies for that year, the loss of revenue would be \$27,686,415. While the commission's schedule is generally lower than the companies' charges, in many cases it is higher. But, in making their estimate of the probable revenue under the commission's schedule, the companies assumed that they would not be able to raise their existing charges. Further, the companies assumed that they would have to reduce all intrastate rates that were inconsistent with the commission's interstate rates in the same region.

In response to the companies' claim that the commission's schedule would cause a reduction of revenue to the extent noted, the shippers deny the conclusiveness of the reported test on the basis of the business done on October 23, 1912. In the first place, the shippers contend that test is unreliable. And in this they were supported by the Interstate Commerce Commission. It was found that all of the companies responding reported a revenue for October 23, that was appreciably in excess of the average daily revenue for the fiscal year ended June 30, 1912. For all nine respondents, this excess amounted to 12.27 per cent. For the five leading companies it was 12.64 per cent.

This excess revenue per package might result from an increase in rates, or an increase in average weight per package, or an increase in average haul per package, or an increase in the proportion of high-class traffic taking higher charges. There had been no increase in rates or charges for the day in question. The average weight per piece on October 23 showed no appreciable change from the average weight for the three months in 1909. The comparative average weights and the per cent of change are shown in the table on page 842 in connection with the per cent of the excess in the average revenue per piece on October 23 over the average for the three months of 1909.

Counsel for the shippers concluded from these facts that the increased average revenue per piece on October 23 must have been due to an increase in the average haul per piece on the day selected for the test. The commission notes, however, that this excess in average revenue per piece may be due to an abnormally large proportion of merchandise traffic, which takes higher charges than other classes of traffic. In this connection, it makes comparison with data for another day's traffic carried by the Adams company and the United States company. The returns by the United States company for October 23, 1912, show that the revenue from mer-

Comparison of the difference in average weight per piece with the difference in average revenue per piece, for October 23, 1912, and for 3 months of 1909, for each of 9 respondent companies.¹

Name of company	Per cent by which the average weight per piece on Oct. 23 differed from the average weight for 3 months of 1909		Per cent by which the average revenue per piece on Oct. 23 exceeded the average revenue per piece for 3 months of 1909
	Greater	Less	
Adams Express Co.		3.1	12.8
American Express Co.	16.2 ²		15.2 ²
National Express Co.	1.3 ²		40.9 ²
Globe Express Co.		2.5	72.1
Great Northern Express Co..		1.0	55.3
Northern Express Co.		1.0	21.6
Southern Express Co.		6.2	1.1
United States Express Co..	3.8		18.1
Wells Fargo & Co.		1.5	10.3
Western Express Co.		9.0	33.1

¹ Based on data in the decision of the commission, 28 *Interstate Commerce Commission Reports*, pp. 146-147.

² The American Express Company and the National Express Company reported separately for the 3 months of 1909, but as one concern for October 23, 1912. The percentages shown here were found by comparing the combined report for October 23, 1912, with the report of each for the 3 months of 1909.

chandise rates was 75.81 per cent of its total revenue for that day. But on December 22, 1909, in the midst of the heavy Christmas business, when the greatest possible revenue from merchandise rates is obtained, the revenue from that source was only 69.98 per cent of the total revenue for that day. The figures for the Adams company do not afford equal support to this criticism. The commission notes, that the Adams company reported for October 23, 1912, revenue from merchandise rates amounting to 78.73 per cent of the whole, while on August 18, 1909, its revenue from merchandise rates was only 68.2 per cent of its whole revenue for the day.¹⁸ But August is probably the time of year when the proportion of merchandise shipments is lowest. Hence, there would normally be a larger proportion of merchandise traffic in October than in August. The difference noted is only something over 10 per cent and may well represent no more than the usual increase in merchandise business.

Whether the abnormal revenue per piece on October 23 was due

¹⁸ 28 *Interstate Commerce Commission Reports*, p. 146.

to unusually long hauls on that day, or to the unusually large proportion of merchandise traffic, either abnormality in the traffic for that day would produce an exaggeration of the actual reduction in revenue that would follow the application of the commission's schedule; for the commission's reductions are heaviest on the charges for the longer distances and for merchandise traffic. The commission summarizes the situation in these words:

So for this day in October (a month which produced over one tenth of the amount of the gross revenue for the preceding fiscal year) the commission is presented a showing which indicates 12 per cent more revenue than the daily average for that year, and from 6 to 10 per cent greater return from merchandise rates than upon normal days. It is also shown, as the basis for estimated reductions in revenue, average revenues per piece which exceed the averages of the three months by from 1 per cent to 72 per cent, and is asked to conclude therefrom that the proposed rates are too low.¹⁹

Analyzing further the returns for October 23, 1912, the commission points out that, according to the returns made by the companies for that day, the average revenue per piece that would have been produced under the commission's schedule, was in the case of six of the nine respondent companies, slightly greater than the average revenue per piece for the three months in 1909, and, for the remaining three companies, it was slightly less. So that, when all individual or local variations are smoothed out, the average revenue per piece under the commission's schedule would be about the same as that received by the companies in 1909.

From its examination of the returns made by the companies for October 23, 1912, the commission arrived at these alternative conclusions:

It may be said that the business for October 23 was abnormal, and that is the conclusion forced by analysis of the figures presented by the respondents. If this be the accepted conclusion, then the elaborate estimates of loss based upon those figures lose all persuasiveness. If this conclusion is not accepted, however, and the business of this day is regarded as normal, then it appears that the earnings per package at the proposed rates would not have been greatly below the actual average returns per package for the three months in any case, and that as to six of the nine respondents the returns per package for the day at the proposed rates would have been in excess of the actual average returns for the three months at the companies' rates.²⁰

This second conclusion is hardly final, as to the reasonableness

¹⁹ 28 *Interstate Commerce Commission Reports*, pp. 146-147.

²⁰ *Ibid.*, pp. 147-148.

of the commission's schedule, because the companies allege that their expenses have steadily increased in recent years. It is conceivable that an average revenue per piece equal to that of 1909 would be inadequate at the present time because of increased expenses per piece. However, the commission gives consideration later to the companies' claim that their expenses forbid a reduction of revenue.

Besides the matter of the abnormal character of the business on October 23, 1912, the shippers reject the test of that day on the further ground that the reduction of charges would stimulate an increased business without a corresponding increase in expenses, and that any conclusion from actual business done in the past does not take this into account. The only conclusive test, contend the shippers, is a trial on the basis of the actual charges proposed. To support their position in this matter, counsel for the shippers cite the well-known fact that a reduction of the price or charge for any commodity usually increases the demand for it. In the case of express, it is pointed out that the source of the increase in traffic is not limited to the potential traffic that is not now shipped.

The express companies have, in addition, the package business now carried by freight to draw from through reduced rates. The railroads have said that this package freight is unprofitable to them. Express business is principally for small packages; freight, for bulk traffic. One result of the new rates may be to readjust this business to some extent, both in the interest of the express companies, and of the railroad companies.²¹

Further support for their contention that there would result a compensating volume of new business without proportionate increase of expense is urged by the shippers in the experience of the express companies under the reduction of rates in the state of Nebraska. The new rates went into effect May 1, 1908. The revenues from intrastate business for the five companies²² operating in Nebraska showed in the year ended June 30, 1909, an increase of 9.5 per cent; for the following year, 26.5 per cent; and for the year ended June 30, 1911, an increase of 33.9 per cent. Expenses on account of both intrastate and interstate business of these companies decreased in the year ended June 30,

²¹ *Brief for Express Rates Conference*, p. 19.

²² Pacific Express Co., American Express Co., Adams Express Co., United States Express Co., and Wells Fargo & Co.

1909, 15.8 per cent; in the following year, 7.0 per cent; and in the year ended June 30, 1911, they increased .6 per cent.²³

With respect to the experience in Nebraska, the companies claim that the stimulated increase was "practically all with respect to general specials, which have been drawn from the railroad freight business or attracted to intrastate markets because of the very low rates;" that the increase in merchandise traffic was no more than the normal increase from year to year; and that, therefore, this particular experience cannot apply to the schedule of the Interstate Commerce Commission because that schedule does not contemplate any appreciable reduction in general specials, but makes drastic reductions in merchandise traffic.²⁴

Further, the companies claim that it would be impossible for the loss of revenue that would result under the commission's schedule to be compensated by new business. In the first place, the competition of the parcel post will prevent the companies from gaining any new business and will even take away part of the business they now have. In support of this contention the companies gave the results of a comparison of their revenues for January and February in 1912 and for the same months in 1913 on the traffic from their more important offices. These results are summarized in the following table:

Per cent of increase, or decrease, in express revenues for January and February, 1912, under competition of the parcels post.¹

Name of company	Approximate per cent of total business represented by offices reporting	Per cent of increase, or decrease, in revenues in 1913 from revenue in 1912, for			
		January, 1913		February, 1913	
		From traffic 11 pounds or less	From all traffic	From traffic 11 pounds or less	From all traffic
Adams	30.	-17.8	+ .1	-29.8	-6.4
American	85.	-19.0	+ 3.9	-27.4	-3.7
Southern	33.	-13.4	+ 9.1	-23.6	+ .1
United States..	45.	-14.2	+ 3.6	-19.9	-4.5
Wells Fargo...	65.	-15.2	+ 2.6	-24.8	-5.8
All companies..		-16.6	+ 3.1	-25.4	-4.5

¹ *Brief for Five Leading Companies*, pp. 4 and 7.

But, even supposing the influence of the parcel post to be absent, the companies claim that any increase of business that

²³ From data in *Brief for Express Rates Conference*, p. 50.

²⁴ *Brief for Five Leading Companies*, p. 28.

might result could not compensate the loss of revenue on account of the reduction of the charges. It would require, according to the companies' estimate, an increase of over 22 per cent, which is more than the greatest possible increase of business that can be contemplated.

It has been already indicated that the companies' estimate of the loss of revenue is too great. The increase of business necessary to compensate the loss on account of lower charges would thus be less than 22 per cent. But, even so, it is a fair question whether the increase would be sufficient to recover that revenue in the face of competition by the parcel post. It must be remembered that the increase in business must be sufficient not only to recover the loss of revenue, but also to compensate any additional expense caused by the additional business. Before this question can be answered, allowance must be made for the effect of the changed factors in the situation upon the operating expenses of the companies.

Before entering upon that subject, it is in point to record that the commission called the attention of the companies to the volume of traffic carried by them free of cost for the railways and for each other, and in the form of returning empties for shippers. On this matter the commission said:

While it may be that the franks issued by them are within the law, nevertheless the expense of this portion of express business is not legitimately to be charged to the paying patrons. It must be treated as a gift from the stockholders of the respondents to the favored holders of the franks. The amount of this business was not fully reported for October 23. What was reported, however, when computed on the basis of the average charge that accrued on the revenue packages, indicates the possibility of a substantial addition to the yearly revenues without injustice to any one.

The losses in revenue from this free service, calculated according to the method used by the respondents in estimating the reductions of revenue under the commission's rates, are shown to be over two millions of dollars, if account be taken of only the incomplete showing of free service made in the returns for October 23.²⁸

On the matter of returning empties free, the companies claim that wherever this is done, it is a concession required in order to move the traffic in which the containers are used. It applies mainly to shipments of bread and laundry. As to the free service for railroads, the companies claim that that is part of the consider-

²⁸ 28 *Interstate Commerce Commission Reports*, pp. 150-151.

ation in their contracts, and that if this service were charged for, their percentage contracts would have to be on a higher level.

Effect of Commission's Schedule: Operating Expenses

On the question of operating expenses, the companies claim that if, on the one hand, the revenues fall off under the commission's charges, there will not be a corresponding reduction of expenses, because there will be no reduction of traffic except as the parcel post takes it away; and so far as the parcel post does this, the expenses will not decrease in proportion to the reduction of revenue, because the established organization for handling the traffic cannot be cut down in proportion to the reduction in traffic. On the other hand, if the traffic is increased under the stimulus of the lower charges, the increase will entail a more than proportionate increase of expense. This would follow, the companies believe, because

the operating expenses have increased in recent years to a greater extent than the business has increased, and there is no basis whatever for the assumption that an increased business would not involve a corresponding increase in expense.²⁶

The issue between the companies and the shippers over the probable revenue under the commission's schedule appears to center on the question of operating expenses. It is certain that the commission's lower charges will stimulate business not now carried. It is equally certain that the competition of the parcel post will offset this new business in part at the outset, and possibly altogether as reductions in rates and extensions of the service may be made in the future. But, in either case, the net earnings—which are the significant factor—will depend on whether an increase of business will necessarily entail a more than proportionate increase of expense, or a decrease of business will unavoidably be accompanied with a less than proportionate decrease of expense.

This is a speculative question that can be strongly argued on both sides. The argument that expenses would not be reduced in proportion to any eventual reduction of business, because the established organization and plant must be maintained in all its essential features, implies that operating expenses are comparatively inelastic. If that be so, then it militates against the claim of the companies that an increase of traffic would entail a proportionate increase of expenses. And yet the companies contend that

²⁶ *Brief for Five Leading Companies*, p. 29.

this would result because of the unavoidably congested conditions of the terminals in the great cities, through which such a large proportion of express matter must be handled, and because, under the greater number of different charges that bill clerks must use under the commission's schedule, the cost of billing shipments would be increased.

This raises the question as to whether the expenses of express companies might not be reduced through greater efficiency or through a reorganization of the service. The Interstate Commerce Commission has not made any suggestions of this sort, but it has questioned the accuracy of the companies' reports of expenses assignable to transportation. The commission examined expense accounts of the Adams company for August, 1909, and of the United States company for December, 1909. It found sufficient entries not properly chargeable to transportation expense to reduce the recorded expense of the Adams company 8.5 per cent and of the United States company nearly 8 per cent.²⁷ This would more than offset the Adams company's estimate of its operating deficit under the commission's schedule, and would nearly offset that of the United States company. The claim of the companies that expenses, including payments to the railways, are steadily increasing faster than revenues, in spite of the elimination of erroneous entries, the commission considers to be without significance, on the ground that, under the percentage contracts with railroads, this result can be produced whenever the contracting parties so desire.

Turning to the argument urged in support of the belief that express companies' expenses are needlessly high, the possibility of economizing in operating expenses is suggested, for one thing, by the comparison of the operating ratios of different express companies. Differences are found from company to company so great as to intimate that something besides differences in character of traffic, length of haul, or other local influences are at the bottom of them. Moreover the possibility of increased efficiency is suggested by the fact that labor comprises probably three fourths of the operating expense of express companies, aside from payments to the railways. This may be said notwithstanding the fact that express employees are scattered and hence do not admit of that degree of organization attainable with large numbers of men concentrated in one establishment.

²⁷ 28 *Interstate Commerce Commission Reports*, pp. 148-149.

The most promising argument that operating expenses could be reduced is directed at cutting down the amount of work now performed upon each package or shipment. At the present time, for every shipment the forwarding agent has to make out a way-bill. On this he enters the name of the consignor, and the date of shipment, the name of the consignee and the destination, the weight and description of the shipment, and the serial number of the package for the day of shipment. This way-bill accompanies the shipment and is checked against it by every responsible employee through whose hands it passes on its way to destination. Meanwhile the forwarding agent has to send to the office of the company's auditor a report giving full information on every way-bill issued by him. At the other end of the line, the receiving agent, after checking the way-bill against the shipment, forwards it with his report of way-bills received to the auditor's office. In the auditor's office, the way-bill is then checked against the report from the agent at the point where the way-bill originated. In the case of shipments carried by more than one company, much of this work is duplicated by each company that handles the shipment. And, besides, the total charge is pro-rated, or apportioned, to the several companies. This has been the method employed by the express companies without essential change for a generation. Obviously, the total amount of clerical labor performed upon each shipment entails a very considerable expense.

This expense is made still greater by labor incidental to the method of paying railway companies for transporting express traffic. The practice is now pretty universal of allowing the railways an agreed percentage of the charge received from each shipment. Hence, to ascertain the railway compensation, each express company must further apportion the charge recorded on each way-bill between itself and the railways over which it operates. If more than one railway has participated in the service, the railway share of the charge must be pro-rated to each of the railway companies. Plainly, a considerable part of the charge on each shipment is required to pay the cost of all this bookkeeping labor.

Express men justify this laborious method of handling shipments on the ground that it is necessary to have a sure record for locating loss, or damage, or dishonesty on the part of employees, in order to guarantee shippers security for their property. On the face of it, this point would seem to be well taken. But there is, notwithstanding, a surprising number of complaints of shipments

that do not reach the consignees, or that are unaccountably damaged in transit, and some amount of such losses must inevitably result from the haste and tension under which the traffic must be handled. These conditions make way for the human element in spite of all precautions, and open opportunities for mistakes and for clever employees to profit by dishonesty. So the question has arisen whether this laborious machinery is not too refined for the degree of security attainable under the conditions that are inseparable from the nature of the express service; whether the cost of the additional security attained by it is not far in excess of the losses that it saves. And it is urged that some less costly method of handling traffic might be devised without incurring more risk to shipments than is inevitable in the nature of things. In this connection, reference is usually made to the fact that the express service in European countries has no such complicated accounting system, and that the post office manages to keep the loss of mail matter down to a minimum by a system of inspection and surveillance, which the express companies have to adopt in part anyway. It is also said that, while the parcel post experienced numerous instances of loss and damage at the outset, many very large shippers now say their losses are no greater than those they experienced with the express service. If it be deemed essential to retain some means of identifying each shipment in the accounts, it has been suggested that some system based upon the principle of the baggage check would satisfy this requirement at much less expense than the present way-bill system. An enormous amount of duplicated labor in apportioning the charges on through shipments could be obviated by a form of central accounting office analogous to the clearing house of English railways.²⁸ But, it is certain that, for many shipments, the doubly sure safeguard of an individual record for each shipment would not be sought by shippers, providing the charges could be reduced by the amount of the saving that would result from omitting it. And there are many other shipments for which shippers would prefer insurance under private insurance agencies, if the express companies eliminated their costly safeguards and reduced their charges accordingly. Even if the percentage of losses increased somewhat, shippers of a great part of the express traffic would probably find their increased loss more than compensated by the saving in their annual express bill. Ship-

²⁸ Unsigned article, "What is the Matter with the Express Companies," in *Business America*, October, 1912.

ments of greater value or importance could be given the safeguard of individual registration and record of transit in consideration of an additional charge, as is now done with express packages of higher value, and with registered mail.

Most express men view all suggestions that involve a departure from the way-bill system as utterly unthinkable. But it is a fair question whether the really unthinkable thing is not rather the proposition that a feature of business organization, which has remained unimproved throughout the whole development of the express business, must be accepted as fixed and unimprovable for ever and ever, in spite of the fact that other agencies here and abroad have developed a similar service without that cumbrous feature. It is not unreasonable to hold the suspicion that express men are controlled by an inertia of habit, formed and continued in because of the absence of such competition as develops the utmost simplicity of service and economy of operation. To be sure, all companies feel some competition and they are all under pressure to secure the largest possible profits. But the express business is not one that has had to develop under the stern discipline of the ordinary competitive struggle for the survival of the fittest.

There is an impediment to the fullest possible realization of the remedy suggested in the nature of the payment to the railways for the transportation of express matter. Originally, the express companies paid the railways, just as any ordinary shipper, on the basis of the tonnage carried. But, it is claimed, with the increase in the volume of business, the computation of the payment on the basis of weight and distance became cumbersome and a cause of endless controversy between the companies and the railways over the amount of tonnage actually carried and over the relative rates that should apply. Gradually this basis of payment gave way to a percentage of the charge collected by the express companies. The percentage basis being thus established and being dependent upon certain data on the way-bill, if the way-bill be dispensed with in the interest of economy, it will still be necessary to record for each shipment the amount of the charge, the points of shipment and destination, and the route traversed. If this be continued, the possible economy in dispensing with the way-bill will be greatly reduced.

This is not an insuperable difficulty, because a system of identification of shipments on the principle of the baggage check, for example, would, through the record of the charge on each check,

supply all the data necessary for the computation of the percentage payment. Yet, although not a vital difficulty, it strengthens the opposition to any departure from the way-bill as the basis of express accounting.

This difficulty, in turn, is met with proposals for a more economical basis of railway compensation. It is believed by many that some other basis can be devised that would be just as equitable and automatic in its application without requiring the enormous amount of accounting labor in the computation. In this connection, there is urged the space basis, which takes account of the amount of car space occupied and the distance through which it is occupied. This is open to the objection that it neglects the considerable differences in amount of weight that has to be hauled in equal amounts of car space. The element of weight, on the other hand, is recognized in proposals that adopt the principle of railway mail pay, which takes account of weight and distance. It does this, not for each shipment, but by periodic measurements of the average weight carried over fixed distances. This basis meets the objection that it takes no account of the enormous amount of dead weight in the car itself that must be hauled in order to carry the express matter in the car. Compensation would vary with the amount of weight carried, but by no means with the total amount of weight hauled. Other proposals seek to combine these two bases in a system of compensation that would recognize both the car space that must be hauled, regardless of the weight carried in it, and the amount of weight carried in that space.

Payments to the Railways

Another point of attack in the present cost of express service is the payment to the railways. The shippers complain that the railways receive excessive compensation per ton-mile from light-weight shipments and from all shipments that go short distances. This criticism gets a footing in the practice of the express companies, under the percentage form of contract, in fixing their charges to the public so that, after the railway receives its percentage of each charge, the part remaining to the express company will be sufficient compensation for its service. By thus segregating different parts of the whole traffic—all subject to the same uniform percentage rates of railway compensation, but subject to express charges that are equivalent to different rates per pound or per mile—and by comparing the respective revenues from the different parts, it can be made to appear that the railways' share of the

charge on short-distance shipments and on light-weight shipments is unreasonably high. Of course, *per contra*, the express companies' share of the charges on long-distance shipments and on heavy shipments appears unreasonably high. But it is clear that these criticisms rest on the false assumption that the uniform percentage rate is adopted as representing a reasonable division of the charge on each individual shipment separately considered, instead of being an average division of all the charges that would otherwise be divided on the basis of a different percentage for different classes, weights, and distances. In such case, the railways would insist upon higher percentages for the heavier weights and the longer distances, while the express companies would insist upon lower percentages for lower classes, lighter weights, and shorter distances. But for the sake of greater simplicity in accounting, there is applied to all shipments a uniform percentage that will secure to the railways an aggregate revenue that will compensate them for their aggregate service and will reach the same result that would be secured under a more complicated schedule of different percentages for different shipments. If the express companies should abandon their practice of fixing charges as above described, and should make each part of the charge proportionate only to the actual service rendered by the railway and the express company in each case, though still fixing all of the charges on a level that would yield the same gross revenue for a given volume of tonnage as now, the charges to the public would be considerably readjusted; but the aggregate railway revenue from express and the average railway express revenue per ton-mile would be exactly the same as now. This criticism of the shippers is thus, in effect, not a criticism of railway express revenues, but of the express companies' method of constructing their charges with reference to the percentage contracts with the railways.

But the shippers criticize the railway revenues in the aggregate, also, and with respect to the average per ton-mile on the whole traffic. They find from data in the records of the hearings that the average revenue per ton-mile received by the railways from the Adams company on August 18, 1909, was 7.8 cents; and from the United States company on December 22, 1909, 7.3 cents.²⁹ These results accord with other estimates of average railway express revenue per ton-mile. The shippers then compare them with the average freight revenue per ton-mile namely, 7.5

²⁹ *Brief for Express Rates Conference*, p. 31.

mills, and make the statement that "for hauling express matter the railroads are paid ten times as much per ton-mile as they receive from freight." This sort of comparison, however, can be of little service in testing the reasonableness of railway express revenue because of the very great difference between the character of the traffic and service to which 7.5 mills applies and the character of the traffic and service to which the 7.5 cents applies.

A more consistent comparison is made by the shippers when they set over against the railway express revenue actually received in certain cases the revenues that the railways would have received in those cases on the basis of twice the first-class freight rate. These computations show that the railway express revenue was 3.3 times the first-class freight rate in the case of the Adams company on August 18, 1909; 3.26 times the first-class freight rate in the case of the United States company on December 22, 1909; and 2.76 times the first-class freight rate for the Adams company on October 23, 1912.³⁰ The shippers then proceed to argue that, if the railway revenue were but twice the first-class freight rate, then the commission's schedule of charges would leave the express companies ample net revenue to constitute a reasonable profit.

This is an argument that a reasonable compensation to the railways for carrying express matter would be that which, on the average, should equal twice what the revenue would have been from the first-class freight service. In support of this position, the shippers cite a rate on the Chicago, Milwaukee, and Puget Sound Railway on which certain articles are carried on passenger trains from Tacoma and Seattle to points in New England, the North Atlantic States and Ohio, and to other points in the West and South. This rate is \$4 per 100 pounds, while the regular rate by freight service on the same articles varies from \$1.25 to \$3 per 100 pounds.³¹ This, however, is not sufficient to prove the point. The rate is made, apparently, to meet certain traffic conditions in the import trade from the Orient.³² Such a rate is by no means an indication of what the railroads could afford to carry express matter for between any and all points in the United States.

³⁰ *Brief for Express Rates Conference*, pp. 33 and 35.

³¹ *Ibid.*, pp. 38-40.

³² The articles enumerated in the brief for the shippers are dry goods (n.o.s.), grass, reed or rattan furniture, alcoholic or spirituous liquors, straw or palm-leaf hats, linen goods in packages of valuation of \$900 or more for 40 cubic feet, vegetable oils in packages, raw or spun silk, earthenware, toys, fireworks, paper articles.

Another statement urged by the shippers in support of their claim that twice the freight rate would be adequate pay for the railways, is that:

In New England, influenced by the Massachusetts law, which requires a railroad to give equal express facilities to all, the railroad express rate for passenger train service is as low and lower than the present express rates, considerably lower than the commission's rates, and only a very little higher than double the first-class freight rates.⁸³

But, here again, the facts cited pertain to special traffic situations. This rate appears to be an involuntary one on the part of the railroads, since it is "influenced by the Massachusetts law." Even if a voluntary rate, it applies to a densely populated section. It does not appear to be extensively used except for purposes of distribution from a large center like Boston, and it does not cut into the service of the express companies to an appreciable degree, because it does not include the collection and delivery of the shipments. Obviously, the railroads can afford to render such a service under all these conditions and yet be quite unable to afford the same service generally and for a large volume of traffic. It should be noted also that the railway express revenue in New England is lower than elsewhere in the United States, because the percentage paid to the railways is lower and the express rates themselves are lower. This situation has been created to meet the special traffic conditions prevailing within the New England states.

On the whole, whatever might be said for this claim of the shippers, namely, that twice the first-class freight rate would be ample compensation to the railways for hauling express traffic, the support offered in their argument is altogether too special in character and too limited in scope to establish their claim.

The express companies filed an additional response to the order of the commission requesting an application of the commission's rates to some one or more day's business, that was designed to show that the existing express rates were no more than, if they were as much as, fair compensation for the joint service performed by the railways and express companies. In connection with this showing, the companies presented a table intended to indicate the rate of return on the joint property of the railroads and express companies used in the express service. These rates varied from 1.95 per cent to 5.32 per cent for the five leading companies, and averaged for those companies 3.41 per cent. Since the rate of

⁸³ *Brief for Express Rates Conference*, p. 40.

return on the value of the express companies' property is well in excess of those rates, it may be argued that the rate of return secured by the railroads on the portion of their property used for the express service must be even less than these rates. But the argument is invalidated by the fact that the apportionment of railway property to the express service was made on the basis of the railway revenues from the express service as compared with other revenues. Of course, this basis of apportionment would have the incidental effect of tending to justify whatever revenues were actually received. Further, there is no acceptable valuation of the railways' property for apportionment to the express service. No defense of railway express revenues can be drawn from this showing.

Another defense of railway express revenue may be made along the line of an argument offered in the hearings before the commission. It was held, in the first place, that the investigation conducted by the Post Office Department in 1909 into the cost of carrying the mails made the incidental disclosure that the aggregate railway express revenues of nearly all the railroads of the United States for one month were 9.66 per cent of the total revenues from the passenger service;³⁴ while the car space, computed in car foot-miles, occupied by the express traffic was 10.67 per cent of the total car space in the passenger service for the month in question.³⁵ The fact that the railway express revenue was a smaller percentage of the total revenues from the passenger service than the percentage of total car space used for the express service, is held to indicate that the railway express revenue is not an undue proportion of the revenues from the passenger service, considering the relative proportion of that service used by express companies. The argument then points out that the revenues from the passenger service as a whole are far from being excessive. From the results of the same investigation, it appears that the operating expenses and taxes chargeable to the passenger service, assigned

³⁴ The month of November, 1909, was selected for this investigation, but, in the case of some railways, the data secured were for the following December or January. The railways represented in this investigation covered 77 per cent of the railway mileage and 88.9 per cent of the total length of all postal routes.

The data on the revenues for the one month were reported only by the railways' Committee on Railway Mail Pay.

³⁵ This is the figure reported by the Committee on Railway Mail Pay; the Post Office Department reported 10.66 per cent.

by the Post Office Department substantially on the basis employed by the Wisconsin Railroad Commission in *Buell v. Chicago, Milwaukee & St. Paul Railway*, consumed not less than 76.4 per cent of the passenger revenue.³⁶ Considering that the operating expenses and taxes for the whole railroad service for all the railways of the United States consume something less than three fourths of the gross revenues of the railways, this ratio for the passenger service indicates that the revenues from that service are less remunerative than all other railway revenues, and therefore are not excessive. The conclusion is then drawn that, if passenger revenues are not excessive, and if the railway express revenue is not an excessive proportion of the whole passenger revenues, the railway express revenue cannot be excessive.

This argument involves the assumption that railway revenues from all other sources than the passenger service are not excessive. Since that is disputed by some, it will be of interest to consider a finding of the Wisconsin Railroad Commission. In the case of *Buell v. Chicago, Milwaukee & St. Paul Railway*, that commission found the passenger fare could not be less than 2½ cents a mile if the companies were to secure a fair return on their property used in the passenger service in Wisconsin. At that rate of fare, the ratio, for the different companies, between the passenger operating expenses plus taxes and the gross passenger revenues is shown in the following table in connection with the rates of return (interest plus dividend) that the Wisconsin commission found would be realized on the property used in the passenger service under the above rate:

Comparison of the ratio of operating expenses and taxes in the passenger service to passenger revenues, with the rate of return on the investment for the passenger service.

Railway	Ratio of operating expenses and taxes to revenue	Rate of return on investment
	<i>Per cent</i>	<i>Per cent</i>
Chicago, Milwaukee & St. Paul	61.3	8.4
Chicago, St. Paul, Minn. & Omaha	71.0	5.5
Chicago & Northwestern	69.4	6.7

³⁶Since the operating expenses and the revenues in question were not both reported by the same authority, there is an element of incomparability between them. But the percentage given was obtained from that construction of the data that gives the minimum percentage.

All these ratios are materially less than 76.4 per cent, and yet they allow a residual of revenues that yielded no more than 8.4 per cent return on the investment in any case. Of course, such indirect calculations as these do not prove that the railway express revenue is not unreasonable. But they establish a strong presumption to that effect.

From this perhaps too extended review of the evidence and arguments bearing on the question of express rates, it is impossible to draw any conclusion that is certain and indisputable. Much of the evidence consists of estimates into which enter, along with precise facts, assumption and expression of judgment. Much of the reasoning concerns probabilities of the future. Yet some sort of composition may be made of the forces of the different arguments in order to reach a judgment on the probable results.

Ignoring the parcel post for the moment, the probable situation under the commission's schedule may be thus summarized:

(1) The evidence establishes the presumption that the rates and charges fixed by the Interstate Commerce Commission would not cut down the revenue from any given volume of business by as much as the companies claim.

(2) The further presumption is established that the commission's rates and charges would stimulate a considerable increase of traffic.

(3) It is probable that this increase of traffic could be handled without a permanent proportionate increase of operating expense.

(4) It is probable that operating expenses, as reported by the companies, contain elements of expense not properly chargeable to the transportation of express matter.

(5) Considering these presumptions and probabilities, the conclusion is that there would be an adequate net revenue under the commission's schedule. This is not demonstrated; it is stated merely as the presumption indicated by the net significance of all the evidence.

Taking the parcel post into account, and considering the recent reduction in parcel post charges and the extension of the weight limit and the prospect of further reductions and extensions from time to time in the future, the situation may be described thus:

(1) The presumption seems to be established that the express companies can hardly recover their revenues under the commission's schedule in competition with the parcel post as that is now conducted; and that they cannot do so in competition with the

parcel post, if that service is progressively extended on the basis of rates such as those recently established. In the face of such competition the express companies would probably get that part of the traffic which demands collection service or the special care and surveillance in transit afforded by the express companies. But this probably would not be a large part of the whole traffic.

(2) It seems probable that any net reduction in the total volume of traffic, by reason of the competition of the parcel post, cannot be accompanied by a proportionate reduction of operating expenses if the express service is conducted as at present.

(3) Considering that the operating expense accounts probably contain elements of expense not properly chargeable to the express traffic, it seems barely probable that the companies can operate profitably under the commission's schedule in competition with the parcel post as that service is now conducted; but the companies probably cannot operate profitably under the commission's schedule in competition with the parcel post, if that service is extended on the basis of rates as recently fixed. Much less could they operate under the companies' charges that have been in effect hitherto.

Since the parcel post will be a factor in the situation, the question has been asked whether the Interstate Commerce Commission has not unfairly reduced the charges of the companies. On this question, the commission apparently considers only the ability of the companies to render their service on the proposed charges as independent agencies, without regard to the effect of competition. The companies claim that the effect of a loss of traffic to the parcel post will be to raise the cost of carrying the remainder, and that, therefore, a reduction of charges would unfairly create a deficit in the remaining business. But this question is sure to be answered from the viewpoint of the public economy, which considers only getting a satisfactory service for the lowest possible rate. If one of two competitors finds that, because of a division of the business with the other competitor, he cannot do his part of the business at prices as low as his competitor, the public, instead of paying the man a higher price, will transfer to his competitor all of the business as fast as he can handle it. Applied to the express situation, this means that, if the parcel post gives the service that the public wants at lower rates than the express renders the service, the public economy requires that the express companies give way to the parcel post instead of

charging higher rates on the business it continues to carry. To do otherwise would be, in the words of the Interstate Commerce Commission,

... equivalent to saying that inasmuch as shippers have been given the convenience and economy of the parcel post the express carriers must, on that account, be allowed to charge rates higher than would otherwise be reasonable. That is to say, the Commission is called upon to take from the shippers of the country all the benefit that they receive from the parcel post and give it to the respondents in the form of higher rates upon the remaining express business.³⁷

And yet there is this plea for the companies. The above argument does not hold if the successful competitor secures the business on charges that do not cover every reasonable cost, including at least a moderate return to compensate his own effort. Much less does the argument hold if the successful competitor is the public's own agency and the deficit has to be made up out of general taxation. In view of the well-known incompleteness of the government's cost accounting, and in view of the serious attention that Congress is now giving to the contention of the railways that their compensation for carrying mails is inadequate, and especially so since the parcel post traffic has been added, it may be argued for the express companies that the competition of the parcel post does not rest on a sound economic basis. Therefore, if the public for other reasons of public policy sets its own agency to compete in that manner with the private agencies that heretofore engaged in its service, it should, in its regulation of those agencies, permit them to secure for such service as the public continues to ask of them, compensation that is fully adequate under all the conditions created by the government's competition.

Further, there is the fact that the parcel post does not now, and will not until some future time, afford a full alternative service to that of the express companies. If the public provides its own agency for a small part of the whole express service, and, by implication of the limits fixed upon the parcel post, looks to the express companies to perform the remaining major portion, the public ought to pay the companies whatever is fair for carrying that major portion considered by itself, and not considered as part of a whole of which the companies do not have the benefit.

If the above conclusions should prove to be correct, the express companies will have these alternatives under the commission's

³⁷ 28 *Interstate Commerce Commission Reports*, p. 151.

schedule: (1) They can reorganize their service and put it on the same plane, with respect to the individual attention given to shipments, as the parcel post, and afford a service of special quality for traffic that requires it. (2) They can restrict their service to a superior grade and trust to the superiority to attract all traffic for which such superior service may be required. In either case, they would have to seek for every possible means of reducing cost per unit of traffic.

(3) Still another plan much urged upon them is that of developing with the railways an intermediate service between freight and express, *i.e.*, some form of extra fast transportation, with collection and delivery, for less than carload freight that desires expeditious service, but cannot afford the express service. This service would be superior to that of the present fast freight lines, and would be much in demand by shippers. The railways have furnished it to some extent, excepting collection and delivery, between certain points, but cannot afford to develop such a service universally. It would be too much like using a steam hammer to crack a nut. When the traffic becomes comparable to a sizable forging, the railways can be used to advantage. The Interstate Commerce Commission noted this possibility in its first opinion in the case.³⁸

The chief impediment to this sort of service is the matter of economical transportation. The suggestion contemplates that the traffic would not be carried on passenger trains. In that case, there could be no suitable train supported in part by other service. Special fast trains could not be economically operated unless the traffic were dense enough to fill them. It might be possible to use such trains on trunk routes, and to utilize certain accommodation passenger trains on branch routes for retail distribution from the main points along the trunk routes. This is the plan followed in France and Germany for their regular express service; but it would threaten the character of the passenger service on the branch lines. In any case, this sort of service would have to be restricted to cities and the more important towns.

(4) Another solution which is being tested by some companies is that of developing their "order and commission" departments into a general purchasing and marketing agency for the more direct distribution of products from producers to consumers. This contemplates a service that would provide consumers with information as to sources of direct supply and would accept orders from

³⁸ 24 *Interstate Commerce Commission Reports*, p. 432.

them for goods to be purchased, transported, and delivered for a charge that would cover all services. Many such activities are now carried on by express companies, and it would be possible to develop this retail department without undue expense. But it would find a sturdy if not an overcoming opposition from those merchants whose business would suffer because of such a new distributing agency. And that opposition could find effective expression in the form of a boycott with respect to the ordinary traffic of the company.

In conclusion, it looks very gloomy for the future of the express companies as carriers of small parcels. But they have an unexploited field to develop, without important competition, in the matter of an expeditious freight service with pick-up and delivery, and in the matter of purchasing and selling agents in retail distribution of goods. The development of these fields would materially alter the character of the companies' business. But they would then be in a line of activity in which there could be little danger of government competition and in which they would have an advantage over private competitors doing a forwarding or commission business without the express companies' railway privileges.

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OBJECTIONS TO A COMPENSATED DOLLAR

There is little room for difference of opinion as to the importance of preventing fluctuations in the general level of prices. If this level is falling, numerous interests and industries suffer special injury; if prices rise, others bear the chief burden; while all classes in the community are more or less harmed by a movement in either direction.

Any proposal that offers relief deserves consideration, but because of the importance of the interests affected, only a most searching criticism of it will be adequate. The underlying theoretical assumptions should be examined to determine their soundness; the practical obstacles to the adoption of the plan should be considered; and, finally, as many as possible of the details of its operation should be analyzed. Many a device that in its general features seemed theoretically sound and politically feasible, has met disaster because certain apparently unimportant difficulties in operation have been overlooked.

Professor Fisher's plan for a compensated dollar is being subjected to these various forms of analysis. From the theoretical side it has been pointed out that its use of the multiple or tabular standard opens it to all of the objections that may be urged against such a method of correcting price fluctuations.¹ Although Professor Fisher does not admit it, the plan also seems to most critics to be based on the quantity theory of money, as to the accuracy of which there is by no means a general agreement. Even those who accept this theory as an explanation of price movements are not in accord as to the closeness of the connection between the quantity of money and prices and the promptness with which prices will respond to a change in the supply of coined gold.

From the standpoint of political expediency Professor Taussig has recently shown² that an international adoption of the plan would probably be impossible and that a single country would not be likely to attempt it alone. Still other reasons for this conclusion might perhaps be urged, but this paper will be confined to the third of the lines of criticism mentioned above—certain difficulties that would probably be encountered in the operation of the plan. Assuming that it is theoretically sound and that the legislation

¹ For one of the most recent of these criticisms see an article by Professor Kinley in *AMERICAN ECONOMIC REVIEW*, March, 1913.

² *Quarterly Journal of Economics*, May, 1913.

necessary for its adoption could be enacted, is it a workable device?

Professor Fisher has acknowledged the existence of certain obstacles, but there is danger that these very admissions will serve to turn the discussion into other channels. They deserve analysis, however, because they may be of enough significance to prevent the success of a plan otherwise satisfactory.

First, and perhaps most important, would be its serious effect on many long-term contracts. Professor Fisher has admitted that the device could not be applied to check a fall in prices—that “the ‘seigniorage’ must never, of course, be negative.”³ If the “mint-bullion” were less than the amount of bullion in the coin dollar there would be an opportunity for enormous gain by the simple process of melting the coins and exchanging the bullion thus secured for a larger amount in the coined form. These coins would in turn be melted for sale to the mint, there being made on each transaction a profit whose amount would be determined by the difference between the weight of the dollar and the mint-bullion. This process could be kept up with indefinitely great profit to the dealer in bullion and corresponding loss to the government.

In reply to this Professor Fisher urges: (1) that prices will in all probability continue to rise for a number of years;⁴ (2) that the weight of the coin dollar might be reduced from 25.8 grains to 20 grains or 15 grains, either at once or when the contingency appears;⁵ or (3) that if “the index number actually shrinks below par by a substantial amount (say 10 per cent) then all gold coin is to be withdrawn from circulation and gold certificates substituted (or new gold coins of lighter weight).”⁶

The application of the third of these suggestions may be considered first. There would be many obstacles encountered in any attempt to effect the exchange of certificates for coin. Even if the certificates thus issued were redeemable in dollars of the same weight as the ones surrendered it is hard to understand how holders of the coin could be compelled or persuaded to surrender it. Presumably they now hold the coin instead of certificates because they prefer

³ *Quarterly Journal of Economics*, February, 1913, p. 13.

⁴ *AMERICAN ECONOMIC REVIEW*, September, 1912; and *North American Review*, December, 1912.

⁵ *Memorandum on A More Stable Gold Standard*, p. 15. This suggestion does not seem to appear in Professor Fisher's later discussions of the subject.

⁶ *Quarterly Journal of Economics*, February, 1913, p. 14. Also in *The New York Times*, December 22, 1912.

it. Habit strengthened by prejudice sets the custom of each community and so determines the nature of the cash holdings of the banks, as well as the medium of exchange among the people. Or perhaps the needs of the banks in connection with foreign gold shipments make convenient the holding of a considerable amount of gold coin and bullion. A certain quantity of the metal itself is needed and the passage of such a law as the one proposed would in no way change this need.

But if the exchange of certificates for coin could be effected nothing would be gained, so long as the certificates were made redeemable in dollars of the same weight as the ones surrendered. If a reserve of 100 per cent were kept behind them there would be no change in the situation. The same amount of gold represented by certificates would be outstanding and prices would not be affected. If a reserve of less than 100 per cent were kept, these pieces of paper would no longer be certificates of deposit (except perhaps in form) but would become government notes, protected by a reserve as are the greenbacks. Probably Professor Fisher would not advocate such an issue of government promises to pay, an idea which elsewhere he seems careful to avoid by insisting that any "seigniorage," accumulated by the operation of the plan when prices are rising, is not to be disposed of but held as a trust fund. At least, it is important to understand clearly just what his proposal signifies.

The other alternative is a certificate redeemable in a dollar of a reduced weight. Such a proposal, even though unobjectionable on any other grounds, would greatly increase the difficulty of calling in the certificates. Popular sentiment against "debasement of the standard" would be aroused and the coin would be withheld. Moreover, the gold certificates now outstanding amount to over a billion dollars and they could not, without violation of the promises on them, be redeemed in anything but a 25.8 grain dollar. Unless they could be called in, we would have outstanding two kinds of certificates redeemable in different amounts of gold and hence of different value. The annoyance of this in daily business transactions would be difficult to estimate.

The second of the suggestions is that the weight of the coin dollar be reduced either at once or when the contingency arises. Even though no real ground for objection existed, a proposal to reduce the weight of our dollar under any conditions would encounter a storm of protest. Belief in the importance of a dollar

of constant weight and fineness is too deep-rooted to be ignored. There would, however, be real reason for concern. Long-term contracts as expressed in bonds and contracts of lease would be affected in various ways. Some of these are promises to pay a certain number of "dollars," not specifying gold; others promise "gold dollars"; and still others carefully specify "gold dollars of the present standard of weight and fineness" or a definite number of grains or ounces of gold of a certain fineness. In other words, many such contracts are carefully worded to guard against changes in our standard, while others are not. A reduction in the weight of the dollar would result in an immediate and disastrous readjustment in the relative values of these securities.

Assume two bonds each for one thousand dollars due on the same date. The first contains no statement that payments are to be with gold dollars, or else does not specify gold dollars of "the present standard of weight and fineness." The second carefully promises payment in "gold dollars of the present standard of weight and fineness" or perhaps in a given number of grains or ounces of gold of a certain fineness. Prices fall 10 per cent and a reduction in the weight of the coined dollar is put into effect. The first bond being redeemable in the new light-weight dollar would at once become of less value than the second. When one stops to consider the immense number and the great variety of promissory notes outstanding, the seriousness of such a change becomes apparent.

Even if the first of the bonds just mentioned were as carefully worded as the second, its value would be impaired if it were secured by collateral in the form of other promises to pay which were not stated with similar care. Even the possibility of a reduction in the weight of the dollar would introduce into the value of the bonds a speculative element that would vary with the distance of the maturity date. Thus, differences in the wording of the promise, in the date of maturity, and in the nature of the security, would all contribute to an extremely complex and often inequitable readjustment of values if the weight of the dollar were changed or even provided for as a possibility.

If the value (in gold) of all these promises to pay were changed to the same extent, little or no harm would result. But if the value of one should remain the same while that of another was changed, there would be serious injustice. The difficulty lies in the fact that the effect would not be the same on all securities.

If this problem were met by the stipulation that the provisions of the new plan were to apply only to future contracts, great confusion still would result. Large numbers of outstanding leases run for 99 years and some of them for 999 years. Bond issues run from relatively short periods to very long ones.⁷ Until these matured or were retired the values of many of them would be seriously affected, and a prospective purchaser of a security would need in each case to inform himself as to the terms of payment. New issues would be payable in the light-weight dollar, while for perhaps several hundred years some of the older issues payable in the heavier dollar would be outstanding.

None of these difficulties will exist if prices continue to rise; and that they will rise is the firm conviction of many students whose opinions carry great weight. Professor Fisher has very fully and clearly stated the reasons for his views on the point.⁸ This paper is not the place for a reply, even if the writer were capable of presenting it. Yet we may observe (1) that the predictions are based on an acceptance of the quantity theory of money and (2) that authorities are by no means in agreement as to the future of price movements.

Authorities in general, whether quantity theorists or not, are by no means in agreement as to the probable future of the production of gold as compared with the growth of trade. Thus Hon. George E. Roberts, Director of the Mint, has recently stated:

It is an interesting question whether the gold supplies of the next 10 or 20 years will be sufficient to allow of further additions to banking reserves, corresponding to those of the past and to the natural expansion of trade and industry. . . . It cannot be safely predicted on the strength of present conditions in the principal gold fields of the world, that the production of gold will materially increase in the next 10 years.⁹

Sir Felix Schuster, governor of the Union of London & Smiths Bank, Ltd., recently said:

The demands for gold may be expected to show continuous expansion, which the increased production of gold . . . may be expected to be sufficient, but not more than sufficient to meet.¹⁰

Sir Edward Holden, chairman of the London City and Midland Bank, Ltd., at about the same time expressed similar views.¹¹

⁷ The West Shore Railroad First 4's mature on January 1, 1961.

⁸ AMERICAN ECONOMIC REVIEW, September, 1912; and *North American Review*, December, 1912.

⁹ *Annual Report of the Secretary of the Treasury*, 1912, p. 308.

¹⁰ *New York Journal of Commerce*, February 2, 1913.

¹¹ *Ibid.*

There is no occasion here to settle the controversy. It is sufficient to emphasize the fact that there is a pronounced difference of opinion as to the immediate future. Prices may continue to rise for some years longer or may fall.

But even if the general movement for years to come is upward there are minor price movements to reckon with. No matter how explained there comes every few years a decline. These reactions vary widely but at times result in a fall of even more than the 10 per cent suggested by Professor Fisher. This is shown by the accompanying table which gives three different index numbers monthly for the years 1907 and 1908 with the Sauerbeck number also stated quarterly.

TABLE 1.—Index numbers.

Months	1907			1908		
	Bradstreet	London Economist	Sauerbeck	Bradstreet	London Economist	Sauerbeck
January	\$8.91	2499	80.0	\$8.29	2310	76.0
February	8.99	2494	80.7	8.12	2309	74.5
March	9.12	2521	80.0	7.98	2266	74.1
April	8.96	2516	80.7	8.06	2263	73.8
May	8.93	2549	82.4	7.96	2195	73.6
June	8.99	2601	82.0	7.72	2188	72.9
July	9.04	2594	81.1	7.82	2190	73.1
August	8.93	2571	79.4	7.93	2190	72.2
September	8.82	2519	79.1	7.90	2168	72.5
October	8.85	2457	78.8	8.01	2200	72.2
November	8.74	2414	76.7	8.06	2194	72.2
December	8.52	2360	76.2	8.21	2198	72.3

The Bradstreet number reached a high point of \$9.04 in July, 1907, falling to \$7.72 in June, 1908, a drop of over 14 per cent. The Economist number fell from 2601 in June, 1907, to 2168 in September, 1908, over 16 per cent. The Sauerbeck number fell from 82.4 in May, 1907, to 72.2 in August, 1908, over 12 per cent.¹² To avoid the necessity of reducing the weight of the dollar (if the plan is to be adapted to falling prices), it would be necessary to consider some preceding date when prices were low as a starting point or to inaugurate the plan only when we are at a level that could be generally recognized as a low one.

Suppose that the plan were adopted at once (May, 1913), but

¹² These percentages are all calculated by viewing the amount of fall as a percentage of the high point taken as a base. Any other method of calculation would likewise give a decline of 10 per cent or more in each case.

that we consider the low level of 1908 as a starting point. Examining the Bradstreet index number we find the low level of \$7.72 in June, 1908. At present the Bradstreet number is \$9.13, a rise of about 18 per cent. Immediately it would be necessary to begin demanding the deposit of over 30 grains of gold at the mint for each coined dollar. Every holder of uncoined gold would suffer a sudden and serious depreciation in the value of his product. There would be a severe shock also in many other directions as the result of requiring so much "seigniorage" at the outset. Since there would have been no opportunity for an accumulation of "seigniorage" by the mint, any unusually heavy demand for redemption of gold with bullion at the "redemption-bullion" (a price which would be only slightly less than the 30 grains just mentioned) might cause the government serious embarrassment.

If, instead, we adopt our present level of prices as a starting point we face the possibility of a fall in these prices at any time. There has already been a drop from \$9.18 in December, 1912, to \$9.13 in May, 1913 (Bradstreet index number). If Professor Fisher is correct in his conclusion that we are approaching a crisis,¹³ it must be recognized that even though the present decline does not continue a crisis will probably be accompanied by a fall similar to those of the past. A "compensated dollar" could not check such a fall without the disastrous results described above.

No matter how the device is modified it cannot safely be applied to prevent falling prices. Since prices may not continue to rise and since in any case we may reasonably expect periodical reactions in the price level, the value of the plan as a solution for immediate problems is open to question. It certainly is debatable whether a remedy that is, at best, only a half-remedy should be adopted. It is even more doubtful when so many other objections exist.

A second reason for criticising a compensated dollar is its effect upon the exchanges and hence upon our foreign trade both in commodities and in securities. This, of course, assumes that the plan would not be adopted internationally, the reasons for such a view being very clearly presented by Professor Taussig in the article referred to above. If adoption by a considerable number of leading countries could be secured this difficulty could not arise.

That the exchanges would be affected Professor Fisher admits.¹⁴

¹³ AMERICAN ECONOMIC REVIEW, June, 1913, p. 345.

¹⁴ His ready admission of the serious effect on foreign trade is surprising. In reply to the question, "Would not the adoption of the plan by the United

If prices rise and "mint-bullion" is increased, the miner would at first send his gold to England and then draw exchange against it. The resulting increase in the supply of exchange would force down the price to a level at which further exportations of gold would be unprofitable. This point having been reached we would for the time being have a new "par of exchange" at say \$4.82. If prices should then fall, the reverse movement would occur and "par of exchange" would rise to \$4.8665 or to some other level. Whether the fluctuations in exchange would be immediate or would be at all proportionate to the changes in the index number and in the corresponding changes in "mint-bullion" may be open to question. The value of the plan is dependent on the correctness of the belief that commodity prices would respond readily to the changes in "mint-bullion." Such prompt changes in prices would bring correspondingly prompt changes in foreign exchange. As we are proceeding on the assumption that the plan is theoretically sound and would produce the results expected of it by its author, let us examine the effect on our foreign trade.

That there would be fluctuations is clear, but in these fluctuations there is danger, the seriousness of which does not seem to have been fully realized. In discussing the point one must keep in mind that it is proposed to have monthly or quarterly adjustments. If exchange quotations changed promptly after each announcement there would be a sharp fall or a sharp rise that would introduce a speculative element into all transactions involving the use of foreign exchange. If the response were more gradual, there would still be numerous wide variations.

When it is remembered that a large amount of our foreign trade involves or should involve the extension of credit for periods as long as three to six months or occasionally a year, one begins to realize the seriousness of a proposal that makes wide fluctuations possible. At present, sight sterling ordinarily fluctuates between approximately \$4.84 and \$4.89, and time drafts between limits correspondingly close together. Much less than this amount of difference is sufficient to make arbitraging profitable and to justify bankers who have obligations abroad maturing in the future in buying in advance exchange for delivery to them at the time these foreign

States alone play havoc with our foreign trade?" he answers "Yes, most certainly. Foreign exchange would become uncertain and variable. While the plan could be worked if adopted by one nation without the concurrence of others, its benefits would be best secured through its adoption by a number of nations." *The New York Times*, December 22, 1912.

obligations must be met. On the other hand, the American exporter who fears a fall in the exchange will in a similar manner protect himself by "selling short" on exchange in order to prevent a loss. If the limits between which exchange may fluctuate are widened, the uncertainty is correspondingly increased and international transactions both financial and commercial become precarious.

Let us notice first the extent to which these fluctuations would take place. Professor Fisher has made careful calculations of the price movements that would have occurred had his proposal been adopted in 1896 or in December, 1903, with the prices of each of these dates as a base.¹⁵ Table 2 repeats the index numbers as he gives them, showing the price fluctuations that would have occurred had his plan been put into effect on either of the dates indicated. In parallel columns are given the various exchange levels that correspond to the fluctuations in the index numbers. Thus in column I the index number of 100 for 1896 has \$4.8665 as the corresponding par of exchange. By January, 1904, prices having risen by $1\frac{1}{2}$ per cent, there would have been a drop of $1\frac{1}{2}$ per cent in "par of exchange" to \$4.7936. The drop in prices by July, 1904, to 98.4 would have given a rise in exchange par to 1.6 per cent above \$4.8665 or \$4.9443. This first column gives the results with a 1 per cent brassage with quarterly adjustments, the prices of 1896 being taken as the base. Column II gives similar figures, the base being the same and the adjustments quarterly but with a 3 per cent brassage. Column III uses the prices of December, 1903, as a base with a $1\frac{1}{2}$ per cent brassage and monthly adjustments.

Some of the fluctuations are worth noticing. Those of column III are the least violent, but from March to May in 1904 the rise is from \$4.85 to \$4.90; and from October to December of the same year there is a fall from \$4.93 to \$4.86. From July, 1907, to January, 1908, the rise is from \$4.85 to \$5.01; and from July, 1908, to January, 1909, the fall is from \$5.02 to \$4.85. In columns I and II the fluctuations are even more pronounced.

In some instances these extreme fluctuations might be very slightly offset by the ordinary influences that affect the price of exchange but at other times these same influences might act in such a way as to increase the variations. It scarcely seems necessary to emphasize the injury to trade that would result from

¹⁵ *Quarterly Journal of Economics*, February, 1913, p. 22.

TABLE 2.—The index number and "par of exchange."

	I Brassage 1 per cent Adjustments quarterly		II Brassage 3 per cent Adjustments quarterly		III Brassage 1½ per cent Adjustments monthly	
	The index number	Par of exchange	The index number	Par of exchange	The index number	Par of exchange
1896	100.0	\$4.8665	100.0	\$4.8665	. . . .	. . . .
1903 December					100.0	\$4.8665
1904 January . .	101.5	4.7936	100.5	4.8422	99.8	4.8762
February . . .					100.9	4.8228
March					100.2	4.8568
April	101.2	4.8082	100.7	4.8325	99.5	4.8908
May					99.3	4.9005
June					99.5	4.8908
July	98.4	4.9443	98.2	4.9540	98.8	4.9248
August					98.8	4.9248
September . .					98.8	4.9248
October	99.2	4.9054	99.0	4.9151	98.6	4.9346
November . . .					99.4	4.8956
December . . .					100.1	4.8617
1905 January . .	102.0	4.7692	102.0	4.7692	100.4	4.8471
April	101.5	4.7936	100.5	4.8422	99.7	4.8810
July	100.2	4.8568	99.7	4.8810	100.2	4.8568
October	102.9	4.7254	102.9	4.7254	100.8	4.8276
1906 January . .	104.6	4.6427	102.7	4.7352	100.8	4.8276
April	103.8	4.6820	100.2	4.8568	99.9	4.8713
July	103.7	4.6865	100.9	4.8228	100.4	4.8471
October	103.8	4.6816	101.1	4.8180	100.7	4.8325
1907 January . .	106.4	4.5551	103.6	4.6914	102.0	4.7692
July	106.2	4.5648	100.9	4.8228	100.2	4.8568
1908 January . .	100.7	4.8325	96.0	5.0611	96.9	5.0173
July	97.7	4.9784	94.7	5.1244	96.7	5.0270
1909 January . .	101.6	4.7887	98.6	4.9346	100.3	4.8520
1910 January . .	104.5	4.6476	102.9	4.7254	100.4	4.8471
1911 January . .	98.5	4.9394	98.5	4.9394	98.9	4.9200

such a state of affairs, but perhaps a few illustrations should be given. In 1891 Sir David Barbour, in bringing forward the Indian budget for the ensuing year, took occasion to discuss the effects of the fluctuating rate of exchange on India. A few extracts from his remarks at that time are as follows:¹⁶

What India requires is not a high rate of exchange rather than a low rate, but some system under which fluctuations in exchange shall be neither great nor frequent, and shall oscillate round a fixed point. . . .

¹⁶ Sir David Barbour, *The Standard of Value*, pp. 196 ff.

The theory of a beneficial stimulus to trade owing to fluctuations in exchange between countries having different standards of value is an untenable and mischievous delusion. A sudden rise in exchange such as we had this year will unquestionably check business for a time and cause a depression of longer or shorter duration. . . . Almost anything would be better than to accept violent and continual fluctuations in exchange as our inevitable lot for all time.

The United States Commission on International Exchange, appointed in 1903, begin their report as follows:¹⁷

The gradual fall to a lower level of value and the serious fluctuations in the gold price of silver bullion for the past ten years have been slowly but unceasingly undermining the commerce of the important silver-using countries which do not have gold as a basis for their monetary systems. The fact that the importing merchants of such silver-using countries cannot reckon upon the cost in their own local currencies of the remittances in gold, which they must use in making settlements for purchases made in gold-standard countries, has been slowly but surely producing domestic commercial paralysis, checking foreign investments for the development of public and private enterprises, and hampering the importation of the products of the labor of the gold-standard countries. The more enlightened nations which suffer under such stress are alive to the importance of rescuing themselves from the disaster which is surely impending, but, by reason of individual burdens and general conditions, are not strong enough in all cases to place their monetary systems upon the full gold standard with the general use of a gold currency.

This entire report and the one submitted the next year by the same commission are filled with illustrations of the dangerous effect on commerce and business of a fluctuating exchange rate.

A concrete illustration of the loss that may be suffered is found in the following which is quoted verbatim from Margraff's *International Exchange*:¹⁸

In February last, a certain banker sold a draft on Mexico City payable in Mexican dollars at the rate of 37¾ cents per Mexican dollar, advising the draft on date of issue to his correspondent in Mexico, and requesting reimbursements of its equivalent by draft upon his New York bankers. The banker was cognizant of the fact that the value of the Mexican dollar was subject to sudden and violent fluctuations, and knowing this, endeavored to protect himself from a possible loss by charging his customer a price in excess of the current rate of exchange for the Mexican dollar, and in so doing believed himself amply protected.

In due course his Mexican correspondent acknowledged receipt of advice, relating to draft issued, and informed him that the draft would be promptly protected upon presentation, and reimbursed for, in the manner desired on the date of payment of same.

¹⁷ Report of October 1, 1903, p. 11 (Sen. Doc. No. 144, 58 Cong., 2 Sess.).

¹⁸ Second edition, p. 101.

Instead of the draft being presented for payment, within the usual time, it was held by the payee, who happened to be the purchaser, until April the fifteenth. During the intervening time, February to April, 1903, the price of silver steadily advanced so that the Mexican dollar sold by the banker and represented by his draft issued in February, at the rate of $37\frac{3}{4}$ cents, was quoted and converted in April by his correspondent in Mexico City at the rate of $38\frac{7}{8}$ cents resulting in a loss to the banker issuing the draft of $1\frac{1}{8}$ cents on each dollar less the accrued interest on the money paid for the draft during its circulation.

As international trade develops the necessity for more certainty will increase. The margin of profits is narrow and speculative features should be carefully excluded. Moreover, one of the most serious weaknesses in our foreign trade relations at the present time is the unwillingness of the American exporter to grant long credits to the foreign importer.¹⁹ Growth in trade is dependent on an encouragement of this policy but longer credits mean a longer period during which prices for exchange may widely vary.

The above quotations and illustrations all have reference to the fluctuations in exchange on silver-using countries, but the significant fact is that the immediate cause of the difficulties cited was in every case a fluctuating exchange rate. Variations in the gold price of silver may have been the underlying reason but the fluctuations were the source of harm. Any influence that would cause uncertainties in the rate of exchange between the United States and other countries would have similar bad effects. A compensated dollar by its very nature and by the admission of its sponsor would create just this sort of situation.

The movement for a gold-exchange standard in silver-using countries has been due to the facts just cited. Its adoption in many of them seems to have solved the problem and to have encouraged trade and investments. In some respects the compensated dollar may be similar to the gold-exchange standard, as Professor Fisher asserts, but as thus far outlined it lacks the one feature which is most important—the power to maintain stability in our exchanges. The only method by which such stability could be secured is by definitely announcing our adoption of the gold-exchange standard. Our government would then stand ready, as do those of other gold-exchange countries, to buy and sell exchange at all times, at such a price as to keep the rates stable, the drafts being sold against accounts in the center or centers against which they were drawn.

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¹⁹ A thorough study of this is to be found in *Foreign Credits*, published by the Bureau of Foreign and Domestic Commerce, Special Agents Series, No. 62.

AMORTIZATION

Both borrowers and lenders are giving keener attention to the amortization (extinction rather than conversion) of long-time loans. Railroads and industrials in this country will, it is said, soon require from four to five billions of dollars. The sums needed for federal, state, and municipal loans will also be enormous. Accepting the extinction of such loans as necessary, the study of the best way to secure such extinction is essential.

Progressive legislation thereon in Massachusetts is at last conclusive against the sinking fund method of repaying public loans. But now from England comes a profound treatise,¹ by Edward Hartley Turner, supporting the opposite view, not only for public loans, but for commercial or financial undertakings where the conditions are much more variable. A deeper interest in this far-reaching subject is thus aroused on both continents.

Mr. Turner is lecturer on municipal accounts at the Manchester (England) Municipal School of Commerce. In 1906 he was appointed the British accounting expert to the Commission on Public Ownership and Operation formed in New York by the National Civic Federation.

Mr. Turner claims that his elaborate work is entirely practical. It affects financial operations of the largest magnitude. It upholds amortization through sinking funds. It fulfills, however, a dual use; one curative, the other premonitory. The more profound its explanation of sinking fund problems and the greater their stated number, the plainer is the warning to avoid them. The rocks and shoals of financial navigation are to be shunned rather than sought. The principles explained adapt the book both to public finance and to privately owned commercial and financial undertakings; to America as well as to Great Britain; and to any currency of a decimal nature. To American readers a special preface is addressed. An index contains nearly 2,000 references to the text, which is handsomely printed. The entire work is an achievement in substance and appearance; it is replete with the solution of problems incident to sinking funds. It admits that the sinking fund method is the most complex mode of repayment, and yet insists that it is "*by far the best*" (p. 135). It ignores the apothegm that prevention is better than cure; and that prevention should always have the

¹ *The Repayment of Local and Other Loans. Sinking Funds.* By Edward Hartley Turner. (New York: The Ronald Press Co. 1913. Pp. xxvii, 538. \$6.)

first claim. As a treatise on sinking fund therapeutics it is probably unsurpassed; but its attempt to uphold the sinking fund method as supreme for the repayment of loans challenges the experience of both Europe and America. Its very merits tend to frustrate its author's cardinal aim.

The book is not a treatise on the laws of municipal loans. Statutory obligations thereon are very variable both in Great Britain and overseas. The general practice of Parliament and of government departments controlling such matters is not based, the author says, upon any well-defined principles. But the Local Government Board of England seeks to impose a uniform system, especially as to times for repaying loans for public works having longer or shorter periods of duration or continuing utility.

The life of the asset and the consequent period of repayment presents one of the most difficult of funding problems, both in municipal finance and in private undertakings, considering the extended and complicated nature of municipal and industrial activity, ever widening. "This variation in the life of the asset," the author says, "imports special difficulties into the problem, relating to the vexed question of the adequacy or otherwise of the sinking fund instalment as a provision for depreciation, obsolescence and supersession" (p. 346).

Mr. Turner insists that the modern parliamentary practice is right, namely, to require the redemption of public utility loans to be spread over a period well within the life of the asset created out of the loans, and to differentiate between various classes of outlay in fixing the period to be allowed for each (ch. 31). The same practice may be equally sound for private undertakings, even if the conditions thereof are much more variable and elastic, whereby the original arrangements between borrower and lender may be altered.

As the repayment, other than by the simple instalment method (p. 111), of loans spread over a period of years involves questions of compound interest (p. 2), the author first investigates the mathematical principles governing the annual or periodic accumulation of a present sum of money, and also of a sum of money payable or receivable at the end of each of equal and definitely recurring periods of time. All such problems follow the algebraical rule relating to geometrical progression; and the author's primary object becomes a conversion of that algebraical formula into a formula applicable to the main subject-matter of the book, namely,

compound interest. He adopts his own symbols, and in chapter 10 gives a detailed explanation thereof and of his formulae which deal with his standard calculation forms. Throughout the book the higher branches of mathematics are employed in the calculations, for which it is claimed that the ordinary methods of arithmetic are inadequate and that the aid of logarithms must be invoked even if the fullest use be made of the various published tables of compound interest. The final chapters deal with such pertinent subjects as the life of the asset, the equation of the period of repayment, and the incidence of taxation.

The following scheme arranges in groups some of the complex sinking fund problems which are mathematically treated by the author:

The Annual Instalment

- (1) A deficiency in the fund. Two variations.
- (2) A surplus in the fund. Four variations. Remarks as to sinking funds of commercial and financial undertakings.
- (3) The rate per cent. Three variations. Summaries of the methods of adjustment.

The Annual Increment

- (4) Problems relating to the rate per cent of accumulation.
- (5) Problems relating to the redemption period.
- (6) Problems combining the two preceding.
- (7) Problems where the future variation in the rate of income is known and is definite.
- (8) Problems where the future variation in the rate of income is anticipated, but is uncertain.

The Date of Borrowing, and its Relation to the Redemption Period

- (9) Loan for several years in one sum in each year, each loan payable in a prescribed period from the dates of borrowing:
 1. By one sinking fund only.
 2. By separate sinking funds for each year's loan.
- (10) Loan for several years in one sum in each year, payable in one sum on a certain date:
 1. Where date of payment is known when the money is borrowed.
 2. Where date of payment is fixed after the sinking fund has operated for several years, and an adjustment of the fund is required.
- (11) Loan for one or more years, in varying amounts and at various dates each year, and it is required that the revenue or rate account of each year be charged with a proportionate part of the annual sinking fund instalment.

An appendix to the book contains 68 standard calculation forms prepared by the author, to find the exact or approximate rate per cent, or number of years, in connection with each of 5 standard tables of compound interest as applied to a sum of money and to an annual or other periodic payment. Altogether this work, the result of years of experience, is a remarkable demonstration of some of the uncertainties, hazards, and difficulties that beset the archaic sinking fund method of repaying debts.²

According to Mr. Turner (p. 110), the English Public Health Act, of 1875, sec. 234, still furnishes the standard for methods of repaying public debts in Great Britain, and will apply equally to commercial and financial undertakings, as based upon general financial practice. Three alternative methods, at the option of the local authority, are specified, by which the loan debt may be repaid:

- | | |
|---|------------------|
| (1) The <i>Instalment Method</i> ; by equal annual instalments of principal. | } "Serial Bonds" |
| (2) The <i>Annuity Method</i> ; by equal annual instalments of principal and interest combined. | |
| (3) The <i>Sinking Fund Method</i> ; setting apart annually as a sinking fund to accumulate by compound interest such a sum as will, with accumulations by compound interest, pay off the principal of the loan within the prescribed period. | |

Of the first of these three methods Mr. Turner says: "The instalment [serial bond] method is exceedingly simple in operation, seeing that it is merely an arithmetical calculation, and does not involve any question of compound interest whatever" (p. 111).

There is a well recognized canon that the simpler and the easier finance is, "the nearer it is to perfection," yet Mr. Turner instead of recommending the instalment method which he affirms "is exceedingly simple in operation," finally concludes that:

Summing up the respective merits of the various methods of repayment of the debt of local authorities, it may fairly be concluded that the accumulating sinking fund method is *by far the best*. It [theoretically] bears equally upon the taxation or revenue of each year of the repayment period; and as regards the investor, it is at once more convenient and more equitable than either of the other two methods (p. 135).

The conclusions of Mr. Turner, however, should not be taken without careful analysis.

² Compare *The Use and Misuse of the Sinking Fund*, by P. D. Leake (London: Gee & Co. 1912); also in *The Accountant* (London), Nov. 23, 1912, pp. 663-669.

M. Trinquat, in his *De l'Amortissement des Emprunts d'Etats*, published in Paris in 1899, wherein is a bibliography on sinking funds, including ninety-six works in different languages, accepts the principle that finance should be so simple as to be easily understood by all classes, and that the easier it is the nearer it is to perfection (p. 381). He agrees with the eminent political economist J. B. Say in that there are no two ways of extinguishing debt; the *only way* is, for a state as for an individual, to use the revenue above the expenses. Every other form of extinguishing a debt is a pure folly, wherefrom no advantage accrues to the state (p. 385). His opening chapters aim to show that morally, politically, and economically amortization of public debts is a necessity. He maintains that for the public to free itself from the obligation of paying debts is to encourage itself to incur infinitely new debts (p. 78); and he quotes Ricardo, that sinking funds rather tend to encourage expenditure, than to diminish debt (p. 209). And Sargent wrote: A sinking fund "acts on the public as a narcotic," for "the confidence placed in the efficacy of these schemes has contributed further to ease the alarm which the magnitude of the public debt would otherwise have produced."³ A still more modern authority affirms that:

Whenever the financial condition of a nation warrants a repayment of debt there are simpler methods of proceeding than sinking fund arrangements. . . while it [a sinking fund] has been discarded in the practice of the more advanced nations, it is sometimes used by nations of weaker credit.⁴

And in Canada, Mr. Macpherson, of the Institute of Chartered Accountants of Ontario, has pronounced "the day of the sinking fund as past," insisting that, "with a thorough sense of the responsibility attaching to the position which I take, I have no hesitation in saying that the sinking fund is a curse to the average municipality. . . . By far the greater part of the debentures issued at the present time are upon the instalment or annuity plan."⁵

Mr. J. Hampden Dougherty, a member of the Charter Commission for a new charter for New York city, wrote to the "New York Tribune" of April 12, 1909, that:

The theory of sinking funds as security for the payment of public debts has become obsolete. . . . The Commission of 1908 favors the

³ *Sinking Funds*, p. 170.

⁴ *New International Encyclopedia*, vol. VII, p. 617.

⁵ Macpherson, *Municipal Accounting*, pp. 26, 28.

abolition of all sinking funds, which, however, may not be done without breach of contractual pledges, unless the city debt be *entirely refunded*. Great as the problem of refunding would be, it would be wise to attempt it and eliminate all sinking funds for the future. . . . The sinking funds are a clog upon the city's development. . . . From every point of view the perpetuation of the sinking fund system is unnecessary and costly.

While Mr. Turner's chapters on sinking fund problems are so elaborate, his general summary of all three methods of repaying debts (p. 140) is hardly adequate, for the tabular statement there given and printed hereinafter on page 886 is based upon a loan of only £1,000 repayable in the short term of 10 years. Mr. Turner fails to emphasize the enormous difference in the cost, and far greater difference in the interest account to the borrower or taxpayer, between these methods when applied to larger amounts for longer terms. The inadequacy of such limited illustrations of this phase of funding has often misled. As such transactions apply to hundreds of millions of dollars of loans, often running for 20, 30, 40, 50 and more years, a tabular statement of the great difference between the practical result to the taxpayers of the instalment or serial bond method and the sinking fund method in larger operations, is in justice obligatory and will be presented later in condensed form.

Furthermore, the sinking fund, which is supposed to earn enough to meet the principal of the debt, but which earns *no part of the interest*, that being often far greater than the principal, is subject to constant risks. It is notorious that sinking funds are often neglected, mismanaged, lost, made the scapegoat by being appropriated to other uses, and have been stolen. Even state constitutions and state laws to maintain the inviolability of sinking funds, are found to be inadequate to protect either creditor or debtor. However sound in theory a sinking fund may be, it is the *mode of investment, its administration*, which is the vital point. Expense, too, lurks in the prolonged interest account which taxation must meet annually, and which must also meet any deficiency in the sinking fund.

The suspension of a sinking fund is at times deliberate, and is essential in sound finance if money must be borrowed to maintain it; for to borrow to keep up the sinking fund is a purely fictitious operation, which really adds to the debt it in no wise reduces. England suspended the sinking fund in 1886-87, after the war in Egypt, and again more recently on account of the Transvaal war,

reliance being placed upon the nation's credit for the final liquidation of these debts.⁶

In England the successive failures of sinking funds, it is said, "made the term Sinking Fund almost one of reproach."⁷ Again:

In 1816 a Sinking Fund was commenced in France, on the principle of Mr. Pitt's English one. It has long since ceased to produce any effect but that of creating confusion in the accounts.⁸

In time of peace, it [the sinking fund] has no efficacy beyond that which would result from applying the surplus revenue to an equal amount in the redemption of the debt; and in time of war, when more debt is contracted than is paid off, it ceases to have any efficacy whatever, and only serves to increase the burdens of the people when they are least able to bear them, not only by the expense attending one per cent of taxes raised, but by the expense attending the execution of the plan.⁹

As late as 1869, from England came astonishing revelations, proved by a parliamentary committee, to the effect that:

Estimated as a net result of the sinking fund system kept up during war, the nation had, between 1785 and 1829, borrowed £330,000,000 at about 5 per cent interest, in order to pay a debt of the same magnitude at 4 ½ per cent interest. This policy, by which a debt of 4 ½ per cent was converted into one of 5 per cent, meant an annual loss of interest of £1,627,765 extending over forty-three years.¹⁰

Equal to a total loss of £69,993,895 or \$338,770,427!

During our Civil War the United States did not make that mistake, for although the Act of 1862, authorizing legal-tender notes, provided for a sinking fund of 1 per cent, yet:

*Trinquat, *De l'Amortissement des Emprunts d'Etats* (Paris, 1899), p. 388; Raffalovich, "Review of the World's Financial Affairs," *Journal des Economistes*, January, 1903; *Journal of Commerce and Commercial Bulletin* (New York), February 3, 1903; E. A. Ross, "Sinking Funds," *Publications of the American Economic Association*, vol. VII (1892), pp. 92, 103.

⁷Sargent, *Sinking Funds* (London, 1868), p. 82.

⁸*Ibid.*, p. 131.

⁹"Errors in our Funding System," *Edinburgh Review*, January, 1823, pp. 1, 11, 12. "It is probable that in many cases the use of a sinking fund is an altogether unwarrantable draft drawn upon the future, because there is no reasonable certainty that the fund, whether it be state, municipal, or commercial, will not be raided before it attains its object." (P. D. Leake, *The Use and Misuse of the Sinking Fund*.)

¹⁰Ross, "Sinking Funds," *Publications of the American Economic Association*, vol. VII (1892), pp. 17, 18; Lalor, *Cyclopedia of Political Science*, vol. III, p. 720.

During the war no attempt was made to fulfill this pledge, as the government was continually borrowing and adding to its total indebtedness.¹¹

Or, as stated by John Sherman:

While the United States was borrowing large sums and issuing bonds, it was folly to pay outstanding bonds, and this was not done until 1868, when the Treasury was receiving more money than it disbursed.¹²

The late Professor Dunbar, of Harvard University, in his *Economic Essays* (1904 ed., p. 84 *et seq.*), referring to Mr. Pitt's famous sinking fund system which was swamped by the gigantic wars of the French Revolution, affirms that it rested "upon a complete illusion as to the possibility of holding Parliament permanently to the system—as to the possibility, that is, of binding the debtor by a compact made with himself." On the other hand, Alexander Hamilton, following Pitt, hoped for an adequate surplus revenue to sustain his system, which "was made useless by the astonishing growth of national revenue" (p. 89). So after our Civil War the wonderful prosiliency of the nation swept aside the sinking fund requirements of the congressional act of 1862, reducing them to a mere perfunctory bookkeeping entry.

For many years the state of Massachusetts far outranked any other state in the Union in the magnitude of its state debt. On September 30, 1913, its funded debt was \$117,838,412. Its sinking funds were \$34,674,498. Again, the gross debt, with interest obligations (metropolitan, municipal, state, and county), resting upon the Metropolitan District of Boston and vicinity alone—39 municipalities out of 353 in the state—is about \$400,000,000, on about 400 square miles of territory, or about one twentieth the area of the state. Such a debt—of national proportions—has caused serious study of the operation of sinking funds. Massachusetts, although permitting the optional use of "serial bonds" since 1882 (*Acts of 1882*, ch. 133) finally in 1913 (*Acts of 1913*, ch. 719, sec. 13) prohibited sinking funds for municipal loans, and made the "serial bond" method compulsory for such loans: thus causing all its municipal indebtedness "to be issued upon the same salutary and equitable basis as that already adopted by the Commonwealth" (House Doc. No. 2162, 1913, p. 25). In this respect Massachusetts is supposed to lead the world.¹³ Prior

¹¹ Dewey, *Financial History of the United States*, p. 356.

¹² Sherman's *Recollections*, vol. II, p. 876.

¹³ It may be observed that West Virginia, by its constitution of 1872, art. X, sec. 4, expressly provided for payments of the debt as under the serial bond method as follows: "The payment of any liability other than that of the

to this the present new city charter of Boston (*Acts of 1909*, ch. 486, sec. 26) provided that all loans issued by that city shall be made payable in annual instalments, and that no sinking fund shall be established for any loan. The sinking fund method is now abandoned, as a financial anachronism, out of date, unreliable, too costly, and to be discarded in advanced municipal finance. Certain transit bonds of the city of Boston are specially provided for under *Acts of 1910*, chapter 437 and *Acts of 1911*, chapter 165.

Recent investigations made (under ch. 11, *Resolves of 1912*) by Hon. C. F. Gettemy, the director of the Bureau of Statistics of Massachusetts, of the sinking funds and serial loans of the municipalities of that state (House Doc. No. 2162, 1913), involved calculations of some 1,200 municipal sinking funds (not including about \$42,000,000 in the sinking funds of Boston), and revealed net apparent deficiencies in 40 cities and towns aggregating \$1,794,391.58, and net apparent surpluses in 47 cities and towns aggregating \$2,855,192.37. Hence the legislation that followed (*Acts of 1913*, ch. 719, sec. 13) prohibiting sinking funds in Massachusetts for municipal loans.

Last winter it was discovered that the citizens of the state of New York had been taxed for sinking funds nearly \$19,000,000 (\$18,773,045.57) in excess of the amount required under a scientific bond amortization plan. This extraordinary overtax appears to have progressed through four administrations, and grew out of an erroneous and mistaken policy pursued by those managing that feature of the state's business. It was estimated that the continuance of this huge accumulation of unnecessary moneys would ultimately have amounted to a sum in excess of the whole amount of authorized bond issue of \$234,000,000!¹⁴ This astonishing error would still have its overmatch in the revelations of the English parliamentary committee mentioned above, where the sinking fund mismanagement meant a total loss in 43 years of \$338,770,427!

If the principles of scientific accounting now applicable to local government in Massachusetts could be brought to bear at large, astonishingly lax and ineffective methods would be exposed, as

ordinary expenses of the State, shall be *equally distributed* over a period of at least twenty years."

¹⁴ *Tribune, Sun, and Times* (New York), February 10, 11, 1913.

they have been with many public sinking funds in that state. If, already, an overtax of nearly \$19,000,000 has been enforced for some recent New York state sinking fund bonds, where that state's bonded debt was (Apr. 23, 1912) \$108,055,660, what might not be disclosed with the very many sinking funds of New York city, totalling \$304,860,242, and whose gross funded debt, April 1, 1913, was \$1,137,211,854, or more than the interest bearing debt of the nation?

The New York News Bureau (June 23, 1905) affirmed that:

The provision of a sinking fund has usually been considered as an abundant safeguard for bond investors. Experience, however, shows there have been many exceptions. The most frequent reason for the receiverships of railway companies is the failure to pay the interest on mortgage bonds. During 25 years, up to 1898, more than 700 railroad companies, with a mileage exceeding 100,000 miles, and representing about \$3,000,000,000 in capital stock and bonded indebtedness, had been put into receiverships, notwithstanding the common practice of creating sinking funds for many of them.

About the year 1880 the Boston sinking funds were despoiled of \$82,000.¹⁵ In 1904, \$292,000 were reported as taken from Boston's sinking funds for current expenses in an exceptional way.¹⁶ In 1909 the sinking fund of the city of Lynn, Mass., was reported as about \$400,000 short.¹⁷ The city's sinking funds in Chicago have been reported as generally taken for current expenses.

It has been said that "no part of the commission administration of Des Moines, Iowa, is more brilliant than its financial record." (*Nat. Munic. Rev.*, Oct., 1912, p. 723). But an expert analysis of Des Moines' finances revealed a shortage in its interest and sinking fund appropriations of \$438,827.77, and affirmed that the new commission government had continued to impose inadequate tax levies, falling, in 1909, "far short of yielding even the current interest charge to say nothing of making the proper sinking fund provision." By that analysis it also appears that "the new government like the old has systematically evaded its moral obligation, and is playing fast and loose with the city's credit. On a tax valuation of \$19,551,000, the levy for interest and sinking fund purposes during 1910 should have been 5.9 mills instead of 2.6 mills" (*Nat. Munic. Rev.*, Apr., 1912, pp. 177, 178).

¹⁵ *Auditor's Report*, Boston, 1880-81, p. 7.

¹⁶ *Boston Transcript*, August 15, 1904, but see *Acts of 1903*, ch. 191, §2.

¹⁷ *Boston Herald*, June 7, 9, 1909.

If Massachusetts' lead is followed, forbidding sinking funds for new public loans, a normal result may well be the readjustment or refunding, from time to time, and as conditions permit, of large amounts of outstanding public sinking fund bonds.

The readjustment of both state and municipal sinking fund bonds, or of a large part of them, throughout the nation, into state or municipal serial, convertible consols ("early convertability" being the American policy), or otherwise, is in order; not forcibly, without the consent of the bondholders, as tried in Virginia, but by the voluntary coöperation of both borrower and lender, and to their mutual advantage, as will now appear.

Mr. Turner summarizes the three methods of repaying loans in table 1 on the following page.

This table is for only £1,000 and for only 10 years' time. Yet the difference in the *interest* charges between the three methods is:

		Difference Interest in interest
1. Instalment method	£275.	
2. Annuity method	295.10	£20.10
3. Sinking fund method	500.	225.

The difference in the *cost* of the £1,000 loan to the borrower is:

		Difference Total cost in cost
1. Instalment method	£1275.	
2. Annuity method	1295.11	£20.11
3. Sinking fund method (basis of 5 per cent)....	1295.11	20.11
5 per cent is too high; 3½ per cent is safer, ²² which gives approximately:		
4. Sinking fund method (basis of 3½ per cent)	1352.+	77.+

Bearing in mind the magnitude of modern fiscal and financial operations, a deeper impression is made if in the above tables for £1,000 we read £1,000,000, and assume a proportional ratio of

²² In Massachusetts it is the practice to base the computations for sinking funds "on the assumption that the funds should earn 3½ per cent annually, this being deemed a conservative figure as the basis of a uniform computation" (House Doc. No. 2162, 1913, p. 16). In Canada it is claimed to be "unsafe to calculate on the sinking fund earning more than Savings Bank interest." (*Macpherson's Municipal Accounting*, p. 41.) Mr. Turner himself affirms (p. 148) that for long-time bonds "it is very difficult, if not impossible" to fix an average rate per cent correctly for accumulations for long periods, and adds that "the practice generally is to assume a rate of accumulation slightly lower than the rate of interest payable to the loan holders." He then illustrates by numerous solutions on a 3½ per cent basis.

Table 1.—*The repayment of the debt of local authorities: general summary of all methods, showing the annual charge to revenue or rate in respect of a loan of £1,000 repayable in 10 years under the instalment, annuity and sinking fund methods.*

Year	Instalment method			Annuity method			Sinking fund method			Year
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	
1	£100	£50	£150	£79.51	£50.	£129.51	£79.51	£50	£129.51	1
2	100	45	145	83.49	46.02	129.51	79.51	50	129.51	2
3	100	40	140	87.66	41.85	129.51	79.51	50	129.51	3
4	100	35	135	92.05	37.46	129.51	79.51	50	129.51	4
5	100	30	130	96.65	32.86	129.51	79.51	50	129.51	5
6	100	25	125	101.48	28.03	129.51	79.51	50	129.51	6
7	100	20	120	106.56	22.95	129.51	79.51	50	129.51	7
8	100	15	115	111.88	17.63	129.51	79.51	50	129.51	8
9	100	10	110	117.48	12.03	129.51	79.51	50	129.51	9
10	100	5	105	123.24	6.27	129.52	79.51	50	129.51	10
	£1000	£375	£1275	£1000.	£295.10	£1295.11	£795.10	£500	£1295.10	

increase in the interest and in the cost to the taxpayer or borrower, the result then being, for £1,000,000 for 10 years:

		Difference Interest in interest
1. Instalment method	£275,000	
2. Annuity method	295,100	£20,000
3. Sinking fund method.....	500,000	225,000

	Total cost	Difference in cost
1. Instalment method	£1,275,000	
2. Annuity method	1,295,100	£20,110
3. Sinking fund method (5 per cent basis).....	1,295,100	20,110
4. Sinking fund method (3½ per cent basis)...	1,352,000	77,000

The next table summarizes numerous computations verified by a public accountant and submitted to Massachusetts officials and to the general public, in connection with legislation in that state on sinking funds and serial bonds. Coupled with the prudential reasons that as a rule prohibit the general adoption of the sinking fund method, the application of the following table to large operations at once justifies the rejection of Mr. Turner's conclusion that the sinking fund method is "by far the best."

Table 2.—Serial bond and sinking fund methods contrasted.

\$1,000,000 at 3 per cent Difference in interest in favor of serial bonds				\$1,000,000 at 4 per cent Difference in interest in favor of serial bonds		
20 Years	40 Years	50 Years		20 Years	40 Years	50 Years
\$285,000	\$585,000	\$735,000		\$380,000	\$780,000	\$980,000
Difference in cost in favor of serial bonds				Difference in cost in favor of serial bonds		
Sinking Fund	20 Years ¹	40 Years ²	50 Years ³	20 Years ¹	40 Years ²	50 Years ³
On 3 per cent basis	\$19,426	\$109,199	\$173,305	\$114,426	\$304,199	\$418,305
" 3½ " "	.....	51,791	111,908	76,483	246,791	356,908
" 4 " "	.....	.....	58,057	40,231	194,765	303,057

¹ Decimal for 19 years, and 19 payments.

² Decimal for 39 years, and 39 payments.

³ Decimal for 49 years, and 49 payments.

If the number of payments were to equal the full number of years, there would be an increase over the above in the saving in favor of serial bonds, the ratio of such increase being larger with the bonds of a shorter term.

If both the decimal taken and the number of payments made each equal the full number of years, there will still be a large gain in favor of the serial bonds.

The point is sometimes raised against serial bonds that if a taxpayer can employ his money at a higher rate per cent than is charged for the loan under the sinking fund method, that is if he can earn say 6 per cent with his money and pays 4 per cent for the loan, his profit is 2 per cent on the sinking fund method pending the life of the loan, which profit the serial bond method would, it is assumed, prevent or impair.

A sufficient answer to this appears in an editorial thereon in "The Commercial and Financial Chronicle" (New York, December 23, 1895, p. 1759), which shows that if such an argument based on the value of money to the taxpayer were to be carried to its logical extreme, it would lead to wholly untenable grounds; for if the argument is admissible at all, why could it not with equal plausibility be urged against ever paying off the bonds? Why not let them run indefinitely? The taxpayer would then be relieved from all concern as to the extinguishment of the loan. In comparing the two methods, extraneous considerations of such a nature must, as the editor makes clear, be entirely excluded from the calculation. The assumption that each taxpayer, out of possible thousands, would get say 6 per cent for his proportion of the difference between the two methods is an irrelevant hypothesis. Again, one taxpayer might misuse or lose his entire share; another contrive to get 10 per cent or 20 per cent on his share. The obvious diversities of such an adventitious conjecture help to preclude its application to the main question.

In this connection it may be observed that after a certain period the serial bond requires the annual payment of *less* money than the sinking fund method, so that thereafter, on the score of possible interest profit to the taxpayer, the situation becomes reversed and the result ultimately is in favor of serial bonds. Thus table 3 demonstrates year by year, how a \$1,000,000 twenty-year 4 per cent serial bond compares in cost with a \$1,000,000 twenty-year 4 per cent sinking fund bond, the sinking fund being on a 3½ per cent basis; compound interest is allowed also at 3½ per cent on the differences in the annual contributions between the two methods; and the final saving in favor of the serial bond method is \$59,133.02.

Table 3.—Comparison between serial bond and sinking fund methods—\$1,000,000 at 4 per cent for 20 years.

Years	Serial bond method 1/20 payable each year	Sinking fund method, 3 1/2 per cent basis	Difference in favor of		Interest on difference at 3 1/2 per cent compounded
			Serial method	Sinking fund method	
1	Prin. \$50,000 Int. 40,000 \$90,000	\$76,657 ¹		\$13,343 19 ys.	\$12,308.91
2	50,000 38,000 88,000	76,657		11,343 18 "	9,726.50
3	50,000 36,000 86,000	76,657		9,343 17 "	7,424.69
4	50,000 34,000 84,000	76,657		7,343 16 "	5,389.68
5	50,000 32,000 82,000	76,657		5,343 15 "	3,608.39
6	50,000 30,000 80,000	76,657		3,343 14 "	2,068.28
7	50,000 28,000 78,000	76,657		1,343 13 "	757.39
					\$41,283.84 ²
8	50,000 26,000 76,000	76,657	8 657 12 ys.		\$335.77
9	50,000 24,000 74,000	76,657	2,657 11 "		1,222.14
10	50,000 22,000 72,000	76,657	4,657 10 "		1,912.16
11	50,000 20,000 70,000	76,657	6,657 9 "		2,415.82
12	50,000 18,000 68,000	76,657	8,657 8 "		2,742.62
13	50,000 16,000 66,000	76,657	10,657 7 "		2,901.68
14	50,000 14,000 64,000	76,657	12,657 6 "		2,901.74
15	50,000 12,000 62,000	76,657	14,657 5 "		2,750.97
16	50,000 10,000 60,000	76,657	16,657 4 "		2,457.24
17	50,000 8,000 58,000	76,657	18,657 3 "		2,028.38
18	50,000 6,000 56,000	76,657	20,657 2 "		1,471.39
19	50,000 4,000 54,000	76,657	22,657 1 "		792.95
20	50,000 2,000 52,000	40,000		12,000	\$23,933.86 ²
	\$1,420,000	\$1,496,483	\$139,884	\$63,401	
		1,420,000	63,401		
Saving by serial bond method.....			\$76,483		
Deduct interest saving in favor of sinking fund			17,349.98		
Final saving in favor of serial bond method			\$59,133.02		
¹ Sinking fund	\$36,657	² Interest on sinking fund differences	\$41,283.84		
Interest	40,000	² Interest on serial bond differences	23,933.86		
	\$76,657	Interest saving in favor of sinking fund	\$17,349.98		

Two objections to the serial bond—unpopularity and a high rate of interest—have practically vanished. The advantages of serial bonds to both borrower and lender are now recognized far and wide, and appertain to loans of hundreds of millions of dollars, including industrial as well as public loans. The money market is now too broad, elastic, and responsive to be cramped by the narrower view of the last century.

A third objection to serial bonds has been the larger initial payments required in the earlier years of the loan. Some wish to avoid these in order to put more rather than less of a burden upon their successors. But, in the majority of progressive municipalities, successors of today have far more to bear than their predecessors who could have borne more. The generation to come will have its full share of new tax burdens. The debt incurring tendency is to be restrained by a present liability, rather than encouraged by shifting that liability to a later generation. Moreover, our "successors" are, for a large part, to be *ourselves*; for taxpayers of today between 25 and 40 years of age must still be meeting many present outstanding long-time bonds when from 55 to 70 years of age. The "successor" excuse is not altogether municipal prudence; rather a costly evasion. Again, serial bonds can be paid in equal annual payments as to both principal and interest, or by the "annuity plan." This is more expensive than by the "instalment plan," though less expensive than by the sinking fund plan. Thus: \$1,000,000 at 4 per cent for 20 years costs:

- | | |
|--|-------------|
| 1. By the instalment plan (serial bond)..... | \$1,420,000 |
| 2. By the annuity plan (serial bond)..... | 1,471,635 |
| 3. By the sinking fund plan (3 1/2 per cent basis).... | 1,496,483 |

The principles herein involved are better understood now, and are more highly appreciated even though more clerical labor and more changes in investments are incident to serial bonds. Safety for both creditor and debtor is now recognized as controlling. A modern banking house²³ tersely summarizes the merits of serial bonds, for private and for public corporations, thus:

"WHEN A BOND ISSUE IS SERIAL, THE INVESTMENT
GROWS SAFER AS IT GROWS OLDER."

²³ Peabody, Houghteling & Co., Chicago, Ill.

The striking contrast between the operation of serial bonds and sinking fund bonds was emphasized in tabular statements drawn to the attention of state treasurers of Massachusetts, pending official consideration of this subject. It was thereby shown that the difference in the *interest* account between the sinking fund and the serial bond methods for the three main items, about \$56,000,000 of forty year bonds, of the state contingent debt—park, sewerage, and water—would be about *twenty-six millions of dollars*, even if the bonds had been issued in serial form at a one half per cent *higher* rate than under the sinking fund form! Also that the difference in the actual *cost* to taxpayers, between the two methods, would be about \$8,360,000 on a $3\frac{1}{2}$ per cent basis. Naturally these extraordinary exhibits have stimulated the consideration of refunding many existing public sinking fund bonds into serial bonds even if at a higher rate per cent, provided suitable legislation therefor in the respective states be first obtained.

Tables 4 and 5 that follow give in detail a demonstration of the above statement as to the approximate principal sum of \$56,000,000.

Table 4.—*Massachusetts state contingent debt, as of December 10, 1902, excepting Armory loan of \$1,893,000.*

	3 per cent	$3\frac{1}{2}$ per cent	Total	Interest	Premiums
Sewerage ...	\$7,989,912	\$2,980,000	\$10,969,912	\$13,270,652	\$370,813
Parks	2,680,000	8,350,000	11,030,000	14,826,000	739,160
Water	10,900,000	23,600,000	34,500,000	45,532,875	2,300,487
	\$21,569,912	\$34,930,000	\$56,499,912	\$73,629,527	\$3,410,460
				3,410,460	
				\$70,219,067	
				56,499,912	
Total, principal and interest				\$126,718,979	

If the above 40-year sinking fund, 3 per cents had been issued as serial 40-year bonds at $3\frac{1}{2}$ per cent, and the above 40-year, sinking fund, $3\frac{1}{2}$'s had been issued as serial 40-year bonds at 4 per cent, the difference in interest between the sinking fund method and the serial bond method, even with that increase of interest rate, would be:

Principal		Interest	Principal and interest
\$21,569,912	3% 40 yr. }	(Sinking fund) \$70,219,067	\$126,718,979
34,930,000	3½% " " }		
(1) \$56,499,912			
\$21,500,000	3's at 3½%, Interest		
	40 yr. 1/40		
	each year	\$15,426,240	
35,000,000	3½'s at 4%,		
	40 yr. 1/40		
	each year	28,700,000	
(2) \$56,500,000		44,126,240	\$100,626,240

Difference in INTEREST in favor of
serial bonds \$26,092,827

But even if the above \$56,000,000 (using round numbers) is so successfully financed by the sinking fund method as to pay the principal of the debt at the end of 40 years, yet it is a more expensive method than the serial bond method (due to the difference in interest), whether the sinking fund is based upon a 3½ per cent on 4 per cent or even 5 per cent basis, as appears by the following table, computed by the Robinsonian sinking fund tables, and any excess of such expense involves corresponding additional hazard.

Table 5.

	3½% basis Decimal for \$1 for sinking fund being .011969 for 39 years ¹	4% basis Decimal for \$1 for sinking fund being .010635 for 39 years ¹	5% basis Decimal for \$1 for sinking fund being .008347 for 39 years ¹
\$56,000,000 sinking fund requirements for 40-year loan	\$26,140,296	\$23,226,840	\$18,229,848
\$56,000,000 for 40-years' interest at 3½ per cent	78,400,000	78,400,000	78,400,000
Cost of loan by sinking fund method	\$104,540,296	\$101,626,840	\$96,629,848
\$56,000,000 40-year serial bonds, 1/40 payable yearly			
Interest (annually diminishing) at 3½ per cent	40,180,000		
Cost of loan, serial bond method	\$96,180,000	96,180,000	96,180,000
Difference in cost in favor of serial bond method	\$8,360,296	\$5,446,840	\$449,848

¹ Thirty-nine years, instead of forty, is taken for the decimal, because one year is allowed for the practical operation of the sinking fund; following the practice at the Boston City Hall.

Such data have aroused a strong normal interest in the readjustment or refunding of many outstanding public sinking fund bonds, as the responsive field offering therefor is promising and large, such readjustment or refunding being quite possible for the mutual advantage of both borrower and lender through appropriate legislation that recognizes a voluntary coöperation on their part.

Two kinds of sinking funds are noticed by our courts: a real sinking fund, and a pseudo sinking fund. The first is intended ultimately to extinguish a certain indebtedness; the second is designed to allure purchasers of bonds by holding out a security that is such in appearance only and not in reality. If the first, which is based upon integrity, but is so often exposed to maladministration and to the many contingent problems that Mr. Turner evolves, and may, in the case of public loans, be subject for decades to political vicissitudes and control, has become, for public loans, a subject for legislative suppression, *a fortiori* ought the second, or deceptive kind, to come under vigorous treatment or fall into disuse. "The mere retention in hand of sums out of revenue for any purpose does not constitute a sinking fund; there must be a specific investment of money intended to accumulate at interest."²⁴

"The best way to sink a debt is to pay it; the surest sinking fund is *payment*."²⁵

ALFRED D. CHANDLER.

Brookline, Massachusetts.

²⁴ P. D. Leake, *The Use and Misuse of the Sinking Fund*.

²⁵ George Morgan Browne, *The Sinking Fund* (2d ed., 1880), p. 10. Mr. Browne was at one time president of the Eastern Railroad. See also "New York City Finances," by W. H. Prendergast, comptroller, in *National Municipal Review*, April, 1913, pp. 221, 229.

REVIEWS AND NEW BOOKS

General Works, Theory and Its History

The Economics of Everyday Life. A First Book of Economic Study. Part I. By T. H. PENSON. (London: Cambridge University Press; New York: G. P. Putnam's Sons. 1913. Pp. xiii, 176. \$1.00.)

Elements of Economics. With Special Reference to American Conditions. By HENRY REED BURCH and SCOTT NEARING. (New York: The Macmillan Company. 1912. Pp. xvii, 363. \$1.00.)

Political Economy. By S. J. CHAPMAN. Home University Library, No. 49. (New York: Henry Holt and Company. 1912. Pp. 255. \$.50.)

The enrichment of the college curriculum in the last quarter of a century has been paralleled by a similar change in the range of studies in secondary schools. Since the high schools are for many the final educational institution, it is in them that the beginning, if not all, of the instruction in important fields of knowledge will be received by an influential number of future citizens. The question arises, then, why the prevalent interest in economics and social subjects and their supreme importance in modern society have not resulted in a development of economic and social studies in the secondary schools similar to that which has occurred in the colleges and universities. While this is not the place to consider the complicated reasons involved, there is little doubt that the lack of good textbooks has been one contributing cause for the comparative infrequency of economics in secondary school curricula. The books under review are of interest mainly in considering their adaptability to instruction in such grades. In them one looks not for new truth but for suggestive treatment of the old. Further, they are based upon traditional views as to methods of instruction in economics; and there is no trace of influence from the experiments in more inductive study now being made by certain university and normal school teachers in the Middle West. Assuming, then, the undoubtedly debatable conclusions that economics should be taught in secondary schools and that the instruction should be by the use of conventional textbooks, the questions that arise concern their general reliability, their selection of topics, their emphasis, their point of view, their concreteness and vitality, and the likelihood that they will tend to cultivate

reasoning power, for certainly economic study does not consist of information only.

Mr. Penson's *The Economics of Everyday Life* deals with production, exchange, distribution; and is to be followed by a second part discussing consumption, taxation, trade unions and co-operative societies. While the treatment follows accepted theory and particularly Professor Marshall's views, it is fresh. Examples and illustrations are new; diagrams are simple and seem helpful. Quite properly, in view of its purpose, the largest part of the book is given to production. While the treatment of value and distribution is brief, it is not superficial. The author's classification of France and the United States as now bimetallist countries is the result of his definition of bimetallism, but is contrary to usage and misleading. All in all, this is an excellent attempt to present accepted economic theory to younger pupils.

The book by Professors Burch and Nearing is very different in approach and character. Economics is presented not as a science, so much as an art of welfare. They "discuss the ideals necessary to attain this goal of welfare; the means of promoting welfare through the consumption, production, exchange, and distribution of wealth; and the various efforts of men, individually and collectively, to realize the economic ideal and to attain the goal for which all are striving." Part I treats of economic ideals; part II of consumption of wealth, including standards of living; part III of production, including an extended consideration of the natural resources of the United States, American labor, immigration, labor problems, education, social surplus, agriculture, soil fertility, production of new species, large-scale production, transportation and its regulation. Part IV, on exchange of wealth, deals with value, money, modern finance, foreign trade, and taxation; while part V, on distribution of wealth, and part VI, on economic experiments, are comparatively brief. The treatment is interesting and vital. Throughout the book, theory is reduced to a minimum, the entire treatment of the definition and determination of value being given six pages. The extensive consideration of production is deliberate and is defensible in view of the students the book is designed to reach. There are helpful outlines at the beginning of each chapter. The references seem to the reviewer useless. To refer, for example, without page or chapter to Ripley's *Races of Europe* and to Clark's *Distribution of Wealth* would result in little use of such works by high school pupils.

Judgment upon the book will depend upon one's belief as to the purpose of economic study in secondary schools. If it is to arouse interest in social questions and the modern progressive movement by plunging the student into a discussion of the great live subjects of the day, the book must be favorably regarded. To one who thinks that an attempt to cover with young students the whole range of social and economic problems will lead to superficiality and the habit of jumping at conclusions, already such great dangers in our democracy, the book will be most objectionable. To such a person the topics for class discussion would in most cases seem better suited for prize essays for university and college students than for consideration by youths of seventeen or eighteen. The reviewer confesses to belonging to the latter class and believes that some discipline and training in clear thinking upon fundamentals should be the aim of introductory study in economics whatever may be the age and grade of the student. Nor need this necessarily be devoid of interest.

In sharp contrast to the works already considered is Professor Chapman's *Political Economy*. With remarkable consistency the author holds to an examination of fundamental abstract economic theory, or, in his own words:

Of this book, speculative results of a very general kind are the substance. . . . The explanations that will be presented are those which became current after the exact analysis of Jevons and Léon Walras had been perfected and applied to the whole field of economic phenomena by later writers, particularly by Dr. Marshall.

With no illustrations or examples, except an occasional hypothetical one, abstract modern economic theory, as based on the principle of the margin, in relation to demand, supply, monopoly, money, international trade, wages, profit and interest, and rent (to name the main chapters) is set forth concisely and ably. The only question that arises is whether such an excellent piece of work of its kind was worth doing. Although called an elementary, introductory treatment, it could not be used with young students and would be incomprehensible to the ordinary general reader. One well trained in mathematics and logic, and accustomed to sustained abstract thinking might see, as by X-ray, the skeleton of modern economics; but he would have as erroneous a conception of the vital, live economic thinking of the day as one would have of the human body who knew it only through the fluoroscope.

Vassar College.

HERBERT E. MILLS.

Esquisse d'une Théorie Générale de la Rente. By B. SAMSONOFF.
(Lausanne: F. Rouge et Cie. 1912. Pp. 245.)

Dr. Samsonoff's monograph on rent contains so many exhortations to the use of the scientific method in economics that it leaves in the end more the impression of a didactic essay than a contribution to pure theory. By the scientific method Dr. Samsonoff means the use of a system of simultaneous equations for the solution of economic problems and one must regret that he has given us instead of a concrete example of its use, a work composed two thirds of a critical resumé of the development of the concept of rent, and, as his own contribution to its theory, only certain modifications of Professor Pareto's ideas, and these arrived at by a method wholly deductive.

According to Dr. Samsonoff rent is a phenomenon of the dynamic state. It is the change in value, whether an accretion or diminution, which an economic agent may sustain by surviving from one economic equilibrium to a later one, *i.e.*, the difference between two equilibrium prices. This concept serves to distinguish rent from profit, for the latter is a phenomenon of a single economic equilibrium, *i.e.*, the difference between price and cost. The conditions necessary to the appearance of rent are, first, the dynamic condition of changing value levels; the durability of economic goods to make possible their survival from one level to another; and, finally, a state of competition so imperfect that for long periods supply is not adjusted to a change in demand. Rent, to quote Dr. Samsonoff, is an "index of the imperfection of competition." Although this description may seem to make rent equivalent to monopoly return, this is an identity which Dr. Samsonoff repudiates. He holds that monopoly is due to the voluntary control of supply by an entrepreneur and that voluntary control is not characteristic of the production of rent.

Dr. Samsonoff would thus classify as rent certain portions of incomes, *i.e.*, enduring portions whether positive or negative, due to the natural immobility of productive agents, whether the incomes are produced by land, capital, or labor. Classification of all incomes into competitive or non-competitive and division of the latter group into natural or artificial (voluntary control) may be useful, but it does not supersede classification according to source. Dr. Samsonoff suggests the employment in connection with a different classification of a term which has been associated with classification according to source. Until it is agreed to abandon this classification, it would seem that Dr. Samsonoff's use of the term

rent must breed confusion. It is to be noted that in his discussion of rent-producers, after mentioning rare talents and objects of art, Dr. Samsonoff centers his attention on land as the typical good in regard to which competition is naturally fettered.

In the historical section Dr. Samsonoff's resumé's are, in spite of an occasional eclecticism, for the most part careful. For Ricardo he solicits a respectful consideration such as is due to one of the rude forefathers of the science. In a lengthy chapter he emphasizes to such an extent the fact that in Ricardo's not very orderly exposition there is to be found an historical, a static, and a dynamic thesis, that one is forced to conclude that he overestimates the novelty of this discovery. His critical sobriety may be judged from his statements, that Professor Clark's method of determining the final productivity of an economic agent amounts to solving important economic problems "by etymology" and that a degree of charity is necessary in interpreting Professor Marshall's "expressions fautes ou maladroites."

ESTHER LOWENTHAL.

Smith College.

Grundriss einer Geschichte der Volkswirtschaftslehre. By EUGEN FRIDRICHOWICZ. (Leipzig: Duncker und Humblot. 1912. Pp. vii, 267. 6 m.)

This latest comer in the field of history of theory in general is an extremely condensed sketch of the whole development of economic thought. Its author is a member of the historical school, and he also appears to be sympathetically inclined toward socialism. Accordingly, throughout the entire work, the contrast between his ideas of "rationalism" and "historicism" is in evidence. Of the two hundred pages devoted to modern economics, one half treat of the historical school and socialism. It can hardly be said that the book is unbiased.

No attempt is made to present a chronological account of the development of economics, and this fact finds expression in a failure to associate theories with industrial environment. For example, the following order is observed in treating the men next mentioned: (1) Wieser, (2) Von Thünen, (3) St. Simon, (4) Schaeffle, (5) J. S. Mill. Hadley and Taussig are associated with Rau, Say, and James Mill.

To the reviewer the most interesting feature of the book is its classification of the subject-matter. The author distinguishes

four great classes of economics: mercantilist, rationalist, sociological, and historical; and the rationalists—those whose thought is deductive and absolute—are divided into three sub-groups as individualists, populationists, and anti-individualists. Clearly, however, this is a cross classification. There is nothing to prevent a mercantilist from being a rationalist, and the same may probably be said of a sociologist. Surely a sociologist might be both a mercantilist and a member of the historical school. A populationist, also, might be either an individualist or an anti. Such being the case, it is not surprising that we find some weird combinations. Chalmers, Lauderdale, Sismondi, Von Haller, Adolph Wagner, Naumann, and Minghetti, are grouped together as "religious, ethical, and social rationalists." St. Simon is put with Louis Blanc and Lassalle. Effertz and Landry are classed as socialists. Plainly, the work suffers from the desire of the author to draw sharp lines between broad classes.

An astounding ignorance of American economists is displayed. Take the section on the American historical school, for instance. After remarking that the school took its inception from Germany through the medium of students in German universities and German-Jew immigrants, the author states that the chief representatives of historical economic thought are Dunbar, Patten, and Bolles! Incidentally, Seligman, Ely, and Münsterberg(!) are also said to be worthy of mention. The two centers of the school, we are told, are the American Economic Association and "Harward-University." Yet Taussig classes with James Mill and McCulloch!

The chief merit of the book will probably be found to be its concise catalog of names and writings of German economists who are classed as members of the historical and socialist school. This is the more useful for the reason that there is a full index of names. Another good feature is the analysis of mercantilist policies.

LEWIS H. HANEY.

University of Texas.

NEW BOOKS

BAILLIERE, Y. *L'oeuvre économique de Charles Davenant*. (Poitiers: G. Roy. 1913. Pp. viii, 184.)

BRANDEAU, N. *Principes de la science morale et politique sur le luxe et les lois somptuaires (1767)*. Collection des économistes et le réformateurs sociaux de la France, 9. (Paris: Geuthner. 1912. Pp. xix, 33.)

BARNARD, W. G. *Regulation*. (Seattle, Wash.: Regulation Pub. 1913. Pp. 124. \$1.)

Discusses the question of distribution of production between the four agents of distribution.

BELIN, J. P. *Le mouvement philosophique de 1748 à 1789. Etude sur la diffusion des idées des philosophes à Paris, d'après les documents concernant l'histoire de la librairie*. (Paris: Belin Frères. 1913. 7.50.)

BOCKARD, A. *Les lois de la sociologie économique*. (Paris: Marcel & Cie. 1913. Pp. 352. 8 fr.)

BURKE, E. J. *Political economy, designed for use in Catholic colleges, high schools and academies*. (New York: American Book Co. 1913. Pp. 16, 479. \$1.40.)

To be reviewed.

CORNELISSEN, C. *Théorie de la valeur, avec une réfutation des théories de Rodbertus, Karl Marx, Stanley Jevons et Böhm-Bawerk*. Second edition, revised. (Paris: Giard & Brière. 1913. 10 fr.)

DEVNEY, J. J. *Individualism, the solution of our economic problems*. (Cleveland, O.: Individualist Pub. Co. 1912. Pp. 66. 25c.)

EICHHORN, K. *Wirtschaftspolitik und Volkswirtschaft*. (Hildesheim: August Lax. 1913. Pp. 30. 0.80 m.)

GIDE, C. *Cours d'économie politique*. Third edition, revised and enlarged. (Paris: Larose & Tenin. 1913. 12 fr.)

GIDE, C. and RIST, C. *Histoire des doctrines économiques depuis les physiocrates jusqu'à nos jours*. Second edition, revised and enlarged. (Paris: Larose & Tenin. 1913. Pp. xviii, 786. 12.50 fr.)

GRUENFELD, J. *Die leitenden sozial- und wirtschaftsphilosophischen Ideen in der deutschen Nationalökonomie und die Ueberwindung des Smithianismus bis auf Mohl und Hermann*. Studien zur Sozial-, Wirtschafts- und Verwaltungsgeschichte, 9. (Vienna: Konegen. 1913. Pp. x, 114. 3 m.)

HADLEY, A. T. *Some influences of modern philosophic thought*. (New Haven: Yale University Press. 1913. Pp. vii, 146. \$1.)

HUYBRECHTS, P. *Tableaux synoptiques d'économie politique*. (Bruges: St. Catherine Press. 1912. Pp. 57.)

VON KETELHODT, G. F. *Das Werturteil als Grundlage der Lehre vom Wert*. (Leipzig: Duncker & Humblot. 1913. Pp. iv, 70. 2 m.)

KOBATSCH, R. *La politique économique internationale*. Adapted from the German by G. PILATI and A. BELLACO. (Paris: Giard & Brière. 1913. Pp. vii, 496. 12 fr.)

To be reviewed.

LEWIS, A. M. *An introduction to sociology*. (Chicago: Kerr. 1913. Pp. 215. \$1.)

MASCI, G. *La dottrina del valore di concorrenza*. (Naples: Sangioanni & Figlio. 1912. Pp. 159.)

McKILLOP, M. and ATKINSON, M. *Economics, descriptive and theoretical*. Part I. *Descriptive*, by MARGARET McKILLOP. Part II. *Theoretical*, by MABEL ATKINSON. Introduction by E. J. URWICK. (London: Allman & Son. 1912. Pp. xiii, 216. 3s. 6d.)

This brief textbook for beginners proceeds from facts to principles. Part II states the classical doctrines of economics and some of their recent modifications. Part I describes the phenomena of English social life in common words, and aims to make this description bring home to the student the need of more technical analysis and interpretation and the need of accurate terminology. The descriptive economics of part I does not aspire to teach economic history. While incidentally it sketches the development of English life and industry from primitive times, the writers recognize that economic history cannot be taught properly without the use of technical terms. The authors, both of whom are lecturers in King's College for Women, of the University of London, have aimed to make their book specially suitable for use in girls' schools; but the excellent discussion of such subjects as household budgets and the economic relations between the household and society seems equally suitable for young men.

The text is a model of attractive simplicity. The style, while succinct, is lively and stimulating. The student's attention is constantly directed to the significance of everyday matters, and the beginner is led to utilize in his economic thinking the mass of disjointed facts with which he is already, in a shallow way, familiar.

MORTON A. ALDRICH.

MEMBERS OF THE DEPARTMENT OF POLITICAL ECONOMY OF THE UNIVERSITY OF CHICAGO. *Material for the study of elementary economics*. (Chicago: University of Chicago Press. 1913. Pp. 900. \$3.)

MURDOCH, J. G. *Economics as the basis of living ethics*. (Troy, N. Y.: Allen Bk. & Prtg. Co. 1913. Pp. x, 873, vi. \$2.)

To be reviewed.

OSORIO, A. *Théorie mathématique de l'échange*. Translated by J. D'ALMADA. (Paris: Giard & Brière. 1913. 9 fr.)

PARKINSON, H. *A primer of social science*. (London: King. 1913. Pp. 288. 2s.)

Designed for the use of Catholics interested in social questions.

PESCH, H. *Lehrbuch der Nationalökonomie*. Vol. III. *Allgemeine Volkswirtschaftslehre, II: Die aktiven Ursachen im volkswirtschaftlichen Lebensprozesse*. (Freiburg i.B.: Herdersche Verlagsh. 1913. Pp. xii, 946. 20 m.)

RODBERTUS-JAGETZOW, C. *Aus dem literarischen Nachlass*. Edited by A. WAGNER and T. KOZAK. Vol I. *Das Kapital. Vier sozialer Briefe an von Kirchmann*. Second edition. (Berlin: Puttkammer & Mühlbrecht. 1913. Pp. xiv, 223. 3 m.)

ROSCHER, W. *System der Volkswirtschaft. Ein Hand- und Lesebuch für Geschäftsmänner und Studierende*. Vol. III. *Nationalökonomik*

- des Gewerbeleißes und Handels*. Eighth edition revised by W. STIEDA. Part I. *Nationalökonomik des Gewerbeleißes*. (Stuttgart: J. G. Cotta. 1913. Pp. xviii, 618. 12 m.)
- SCHELLE, G. *Oeuvres de Turgot et documents le concernant, avec biographie et notes*. Vol. I. (Paris: Alcan.)
- SCHREY, M. *Kritische Dogmengeschichte des ehernen Lohngesetzes*. (Jena: Fischer. 1913. Pp. iv, 133. 3.50 m.)
- SEAGER, H. R. *Seager's principles of economics*. Being a revision of *Introduction to Economics*. (New York: Holt. 1913. Pp. 642. \$2.25.)
To be reviewed.
- STEFFEN, G. F. *Die Grundlage der Soziologie. Ein Programm zu der Methode der Gesellschaftswissenschaft und Naturforschung*. (Jena: Diederichs. 1912. Pp. 132. 3 m.)
- TUGAN-BARANOWSKY, M. *Soziale Theorie der Verteilung*. (Berlin: Springer. 1913. Pp. 82. 3 m.)
- WEBER, L. *Le rythme du progrès*. (Paris: Alcan. 1913. Pp. xiv, 311. 5 fr.)
- WITTE, S. J. *Vorlesungen über Volks- und Staatswirtschaft*. Authorized translation by J. MELNIK. (Stuttgart: Deutsche Verlagsanstalt. 1913. Pp. xxvii. 277. 7.50 m.)
- *Papers and proceedings, seventh annual meeting American Sociological Society*. Vol. III. *The conception of human interrelations as a variant of social theory*. (Chicago: University of Chicago Press. 1913. Pp. 223. \$1.50.)

Economic History and Geography

- The Land System in Maryland in 1720-1765*. By CLARENCE P. GOULD. Johns Hopkins University Studies in Historical and Political Science, Series XXXI, No. 1. (Baltimore: The Johns Hopkins Press. 1913. Pp. 101. \$.75.)

Dr. Gould's monograph forms part of a larger work still in preparation on the economic history of Maryland in the same period. This is welcome news to students wishing to search colonial data for light on any modern economic arrangement. In the case of most of the thirteen colonies, there is still need of such investigation as this. Mr. Weeden has already done it in part for New England and Mr. Bruce for Virginia. These advance chapters contain a scholarly presentation of facts drawn from the best sources and arranged chronologically. The main points discussed are the method of granting land, the feudal burdens on it, and its development by speculators. The closing chapter on

manors is simply an extended illustration of the facts already given.

It is made clear that the lord proprietor very largely dominated the land situation in Maryland; that his great aim was to create a permanent colonial revenue by exploitation of the soil. The land was regarded as his private property and the land office as his private affair, consequently the colonial assembly rarely interfered. In actual operation, however, the proprietor's policy was limited by existing conditions. The most noteworthy contribution in the book concerns the effect of the quit-rent, both for good and evil, on Maryland's development (p. 57). The author thinks it can scarcely be doubted that the annual quit-rent, payable in sterling, materially retarded the progress of the colony. According to Dr. Gould, this special tax, added to the other taxes and to the heavy costs of the land office, caused the burdens resting on Maryland land to be greater in their entirety than in either Pennsylvania or Virginia. He thinks this fact explains without doubt why the Germans (and many other families, probably) at first avoided Maryland in their advance into the Great Valley, and passed from Pennsylvania across into Virginia (p. 57). One wishes this point had been developed a little more, with quotations or references, and that the attractive conditions in Virginia for taking up land had been emphasized by way of contrast. On the other hand, the quit-rent (and the purchase price in a lesser degree) had a beneficial effect, says the writer, in preventing the monopolizing of land by a few individuals. This state of things brought about smaller holdings, less woodland, and more people. The quit-rent thus seems from this study to be responsible to a degree for those colonial characteristics that differentiated Maryland from her neighbors.

Dr. Gould differs from N. D. Mereness (*Maryland as a Proprietary Province*, p. 82) in his interpretation of the opposing attitude of the Eastern Shore and Western Shore delegates in the Assembly, on the matter of commuting the quit-rent to a fixed duty on the tobacco exported (p. 39). He thinks it accounted for by the different products of the two shores. He believes the Western Shore tobacco raisers objected to having their crop taxed to pay the quit-rents of the Eastern grain growers.

The chapter on land management would be improved by condensation. Here the author brings out interestingly the connection between the disappearance of the frontier (in the older

counties) and the rise of tenant-farming (p. 83). An exceptional case in which speculators placed tenants on wild lands occurred in two counties (p. 86); this was due to the special conditions in which the newly-arrived German immigrants found themselves.

The quoted passages and footnotes are excellent but there is no bibliography. Few conclusions are drawn or comparisons made with conditions in other colonies. The significance of some of those Maryland practices in foreshadowing features of our present national land system might well have been brought out; as, for example, the custom of granting land free to settlers on backlands and on disputed borders, which reflects our modern homestead law, and the requirement for rectangular surveys in regular order (however disregarded), which suggests our present system of rectangular surveys on public lands.

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The Agrarian Problem in the Sixteenth Century. By R. H. TAWNEY. (New York: Longmans, Green and Company, 1912. Pp. ix, 464. \$3.00.)

Several books on English agrarian history have recently appeared, each endeavoring to restate the old problems from the writer's point of view and usually advancing some new information, not very great in quantity. Mr. Tawney's is one of the best of these. They are not primarily books based upon extensive research like Professor Savine's studies in copyholds or Professor Gay's in enclosures. While so many sources in the archives remain unread, they cannot hope to be final pronouncements upon the topics of which they treat. Useful as popularizations and as summaries, they are sign-posts suggesting the roads which may lead to the still hidden knowledge of English agrarian development. Earliest of them was Mr. Gilbert Slater's studies of eighteenth century enclosures, based upon parliamentary acts and contemporary literature. Soon the Rev. A. H. Johnson published his Ford lectures on the *Disappearance of the Small Landowner*. Last year Mr. E. K. Gonner reviewed in lengthy wise the enclosure literature, adding thereto information from the records of the Privy Council which he had already published in the "English Historical Review."

Mr. Tawney limits his work to the sixteenth century. Inclined

ing somewhat to verbosity, his discussion is none the less thoughtful and his judgment excellent. He adopts the conclusions of his ablest predecessors and is able to add some fresh material in support of his views. The result is a satisfactory and informing survey of the agrarian situation in the sixteenth century so far as we now know about it. The chief defect of the book is the scanty nature of the evidence upon which many of the generalizations are based. Mr. Tawney need not apologize, as he does in his preface, for including statistical tables. Would that they were far more comprehensive than they are!

In the first half of the book the author is concerned to show the prosperity attained by the peasantry at the beginning of the sixteenth century. When he wishes to demonstrate the preponderance of customary tenants over freeholders and leaseholders, he marshals the numbers of each group from one hundred and eighteen manors. So few instances, however, very inadequately represent the thousands of English manors. One large Lancashire manor sharply diverges from the dozen others in the north and vitiates the ratio. The selection by regions is unhappy. From Norfolk and Suffolk come one third of all the manors, while the Midlands are represented by only twenty-two and the west by none whatever. Lastly, the number of persons in a group does not represent its relative importance. Areas held by each group would be more to the point, since freeholders and leaseholders usually held less land than copyholders.

The attempt in Table III to separate customary tenants from copyholders and tenants-at-will is misleading. All belong to the same group and the surveys are careless in interchanging the terms. Some customary tenants did not yet have copies of the record of the court roll, as, indeed, most did not in the days of commutation. The term tenant-at-will, though occasionally applied to a lessee, usually meant a customary tenant (a copyholder if he had a copy). The designation arose from the second half of the phrase by which the copyholder is technically described, *tenens per copiam rotuli curiae ad voluntatem domini*.

One of the most suggestive parts of Mr. Tawney's book is this discussion of the rise of a class of well-to-do copyholders. As a result of thrift and easy conditions of land-transference, many a customary tenant, he thinks, at some time between the thirteenth and sixteenth centuries made additions to his traditional virgate. Whereas there had once been substantial equality of land-holding

among the virgaters, there had come to be marked inequality. Fifty-two surveys of the sixteenth century are tabulated to show the results of such a process. Undoubtedly a change of this sort was in progress and deserves attention—much more than Mr. Tawney was able to give to it. He admits that he can offer no quantitative measurements and he is vague as to what period and what occurrences within the three hundred years are responsible for the tendency. Generalization in these matters without an examination of many court rolls and the conditions attendant upon the Black Death is scarcely safe. Besides this increase in the size of some customary holdings, the fixity of customary rents contributed to the formation of a prosperous peasantry. This is explained and illustrated, but not for the first time. In this connection it could well have been noted that the surveys often estimate the annual value of a customary holding as well as the rent and that the divergence of the two can be accurately determined.

Having argued for the prosperity of the peasantry at the beginning of the century, Mr. Tawney proceeds to inquire why it did not continue. In answer he passes judgment upon current explanations—the increase of enclosures and the uncertainty of some tenures. To the enclosure literature he adds little that is new, unless it be the contention that the tenants initiated a movement, later pushed on by less scrupulous lords. But his evidence here is slight. Enclosure, he continues, in the course of the century increased the size of the demesne farm, but again the cases which he adduces are largely from two counties and are without earlier standards of comparison.

Apropos of the disputed question whether engrossed land was devoted to arable or pasture he compiles the respective amounts of arable, meadow and pasture on the demesne farms of fifty manors. These instances, once more, are too few, too much confined to Norfolk and Wiltshire, too diverse in their indications to admit of the generalizations which the author is inclined to draw. The observation that "the large farmer was by no means always a grazier" is worthy of further development, though Mr. Tawney's thesis leads him to emphasize the pasture farms.

This thesis that customary holdings were suffering considerably from the enclosures of the lords is far less supported by proof than the argument regarding tenures. The latter is excellently stated. Mr. Tawney follows Professor Savine in correctly esti-

inating the dire significance of copyholds for lives and the uncertainty of fines. He adds sixty to Professor Savine's eighty-two manors. He goes farther and gives a few instances of the considerable increase of fines during the century. Above all, he interprets admirably the relation of this to the economic movements of the century. It was one of the important methods by which the landlords recouped themselves for the loss of income due to the depreciation of the fixed customary rents in the price revolution of the century.

A chapter on the attitude of the state toward the agrarian situation brings to a close this eminently sane and readable book.

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- Originally printed in London in 1782 and in Philadelphia ten years later, these charming letters have after a lapse of a century been three times reprinted during the last decade. Crèvecoeur

was a Frenchman who emigrated to America in 1760, and during a stay of twenty years in this country wrote an idealized account of rural life here. While the chief appeal is to the *literateur*, the economist will find ample reward in reading these vivacious pages. This edition is both convenient and inexpensive. E. L. B.

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Epstein, the translator, performed a similar service for Sombart's well-known work *Sozialismus und Soziale Bewegung*, published in England under the title *Socialism and the Social Movement*. In the present prompt translation there are some brief omissions, as the discussion of the modern race theory and the early history of credit instruments. Sombart's animated style does not suffer in the translation.

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Agriculture, Mining, Forestry, and Fisheries

Social and Economic Survey of a Rural Township in Southern Minnesota. By CARL W. THOMPSON and G. P. WARBER. (Minneapolis: University of Minnesota. 1913. Pp. v, 75.)

If X township in Minnesota is representative of rural America it indicates a one-sidedness, by no means pleasing, in our national development. On the purely economic side appears the prosperity so prevalent in the Mississippi Valley. The tendencies of farm organization have been those even more widely known in much of Europe as well as America—especially a decline in grain raising and an increase both in the number of cattle, chiefly of milch-cows, and their value per head. The roads are not exceptionally bad; there are successful farmers' creameries, and elevators, and mutual insurance; the credit situation is satisfactory. But the intellectual life is palpably deficient. The growth of agricultural

knowledge has been chiefly limited to certain principles forced into notice by obvious necessity—as the exhausting effect upon soil of continued grain raising. Only 14 per cent of the farmers attend farmers' institutes. Most of the others say they know "at least as much about their business as an outsider." The books and papers read are seldom above the trivially entertaining. There is little interest in politics or political meetings, and little knowledge of the wider economic conditions affecting the farmers' condition ("prices are what they are simply because town men won't pay more"). Business morality reflects the prevailing intellectual limitation. In agreements which he fully understands the farmer is still fairly honest, "but in the fulfillment of contracts of some complexity the exact meaning and implication of which he does not understand, there are those who are not always honest." Thus the essential character of coöperation as resting on a basis of morality, of subtle obligation, escapes them; "they are coöperating successfully, yet they themselves have no confidence in coöperation; . . . they feel that the farmer won't stick." It doubtless signifies something other than a lack of cleanliness that "the school house floor is scrubbed usually once a year." There is a general failure to condemn the present ineffective pretense of road making and repair by the farmers themselves; only 28 per cent were heartily in favor of a central control "by a county road engineer, whose business it would be to make out plans and specifications of roads and grades, bridges and all, the actual construction to be left to contractors with their own labor and outfits."

As to remedies, the farmers say, "The only way to improve country life is to make it return bigger profits, big money returns are needed, not only big crops." It may, however, fairly be doubted whether there can be improvement in crops, morality, or the social life of the neighborhood without some strong stimulation to the life intellectual. One old farmer complains that "the things they take up in the schools all tend to direct the thought toward what man has done and is doing in the cities, . . . instead of leading the youth to think about the natural sciences as they connect with the hills, the wood and all the well-known life about them." Perhaps this observation may point the way to salvation. A few country schools in different states have, by instruction in the sciences relating to agriculture and even science specifically agricultural, succeeded in awakening a new interest, appealing to the "practical" spirit in showing that there is delight in the use of one's mind. The appetite for that sober intoxicant,

once acquired, will never be lost. It is to be noticed that while the older men generally despise "scientific agriculture," the younger generation thinks that "a little brains often save much elbow grease." "The boys who read generally interest themselves in farm papers or some scientific article in a magazine."

The Minnesota survey appears to have been well planned and intelligently carried out, though the report suffers from crudeness in the use of English.

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Author is law officer of Isthmian Canal Commission.

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To be reviewed.

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MICHON, G. *Les grandes compagnies anglaises de navigation.* (Paris: Arthur Rousseau. 1913. Pp. viii, 255.)

MOLTMANN, B. H. *Hamburgs Schifffahrt in alter und neuer Zeit.* (Hamburg: Eckardt und Messtorff. 1913. Pp. 38. 0.75 m.)

NIGGL, A. *Das Postrecht. Die wichtigsten Vorschriften des inländischen und des internationalen Postrechts mit Erläuterungen.* (Stuttgart: Kohlhammer. 1913. Pp. vii, 267. 4.50 m.)

PFEIFF, E. *Die badischen Staatseisenbahnen und die Grossschifffahrt auf dem Oberrhein.* Vol. I. Grundlagen. (Karlsruhe: G. Braun. 1913. Pp. viii, 72. 2 m.)

PRATT, E. A. *The state railway muddle in Australia.* (London: Murray. 1913. Pp. viii, 164. 2s. 6d.)

STOCKERT, L. R. *Eisenbahnunfälle.* Two volumes. (Leipzig: Wilhelm Engelmann. 1913. Pp. vi, 274, illus. 24 m.)

THOMPSON, S., compiler and editor. *The railway library, 1912.* (Chicago: Stromberg, Allen & Co. 1913. Pp. 470. 50c.)

This is the fourth annual volume designed to render easily accessible noteworthy contributions to railway literature. There are 26 extracts or complete papers. The most important are: "The

Opinion of Justice Hughes of the United States Supreme Court in the Minnesota Rate Cases"; "Safety First, the Slogan," by Interstate Commerce Commissioner C. C. McChord; and several articles on state ownership of railroads. Nothing favorable to or setting forth the advantages of state ownership is included. The last 180 pages are devoted to railroad statistics including figures for a number of foreign countries. The tables are valuable, but the textual analysis shows editorial bias and the conclusions reached are not always warranted by the data. Too often the underscoring of certain portions seems to call attention to statements which meet with the editor's approval rather than to indicate the really salient points in the arguments.

C. W. DOTEN.

Sayings and writings about the railways. By those who have managed them and those who have studied their problems. (New York: Railway Age Gazette. 1913. Pp. 240.)

Most of these extracts are merely short paragraphs from speeches and articles. There are 250 of them representing over 100 authors or sources. Among the topics covered are: What railroads have done and what they mean to civilization and prosperity; Who owns the railways? Wages and labor; Rates and rate-making; Regulation and legislation; Capital and credit; Government ownership and valuation. The first topic gives the keynote of the book which is extremely laudatory and favorable to everything that the railroads have done or desire to do. There is no criticism of railway management, nor is there the slightest intimation that the railway managers have been in any way responsible for what the editor in his preface calls "a new crisis" in the development of the railroads.

C. W. DOTEN.

— *Les ports et leur fonction économique.* Vol. V. Rouen, by G. BONDEL. Montréal, by DEWAVRIN. Seattle et Tacoma, by M. RONDET-SAINT. Trieste, Fiume et Venise, by M. DEWAVRIN. Venise au moyen âge, by C. TERLINDEN. *Les ports du Nord-Est de l'Angleterre*, by J. MEUWISSEN. *Conclusions*, by G. BLONDEL. *Appendice: L'administration des ports*, by J. CHARLES. *L'industrie des transports maritimes*, by H. MANSION. (Louvain: Secrétariat de la société scientifique. 1913. Pp. 272. 3 fr.)

Trade, Commerce, and Commercial Crises

NEW BOOKS

- ADLER, F. *Die Entwicklung des deutschen Häutemarktes.* (Karlsruhe: G. Braun. 1913. Pp. viii, 181. 3.60 m.)
- COUDRAY, G. and CUXAC. *Notions de commerce.* (Paris: Dunod et Pinat. 1912. Pp. 342.)
- HAMMANN. *Die Handelsbeziehungen zwischen Deutschland und Kanada im Jahre 1912.* (Berlin: Springer. 1913. 1 m.)
- HENNIG, R. *Probleme des Weltverkehrs.* (Berlin-Wilmersdorf: H. Paetel. 1913. 5 m.)
- HIRST, F. W. *The six panics and other essays.* (London: Methuen. 1913. 5s.)

VON KRIES, W. *Seezollverwaltung und Handelsstatistik in China.* Probleme der Weltwirtschaft, 13. (Jena: Fischer. 1913. Pp. x, 110.)

SCHAUWECKER, C. *Der schweizerische Weinhandel unter dem Einflusse der gegenwärtigen Wirtschaftspolitik.* Zürcher volkswirtschaftliche Studien, 6. (Zürich: Rascher & Co. 1913. Pp. 294. 9 m.)

WEKERLE, A. *Die passive Handelsbilanz.* (Vienna: Manz. 1913. Pp. 26. 0.85 m.)

——— *Handbook of the port of Boston, 1913.* (Boston: Chamber of Commerce. 1913. Pp. 265. 50c.)

Accounting, Business Methods, Investments, and the Exchanges

The Stock Exchange from Within. By WILLIAM C. VAN ANTWERP. (New York: Doubleday, Page and Company. 1913. Pp. 459, illustrated. \$1.50.)

The Value of Organized Speculation. By HARRISON H. BRACE. Hart, Schaffner, & Marx Prize Essays, XIV. (Boston: Houghton Mifflin Company. 1913. Pp. xii, 290. \$1.50.)

Die New Yorker Fondsbörse. Ihre Geschichte, Verfassung und Wirtschaftliche Bedeutung. By KURT FREIHERR VON REIBNITZ. (Jena: Gustav Fischer. 1912. Pp. 126. 4 m.)

The Elements of Speculation. By THOMAS GIBSON. (New York: The Gibson Publishing Company. 1913. Pp. 149. \$1.00.)

Effektenbörsen. By RICHARD PASSOW. Materialien für das Wirtschaftswissenschaftliche Studium, Vol. II. (Leipzig: B. G. Teubner. 1912. Pp. 148. 2.50 m.)

The books by Mr. Van Antwerp and Mr. Brace are both to a certain extent the result of the renewed agitation in recent years against speculative markets and the widespread demand for their control or abolition by legislative action. Mr. Van Antwerp writes frankly with the object of answering these arguments, although he states that he is speaking purely as an individual stockholder and not as representing the authorities of the New York Stock Exchange. To his experience as a stockbroker is added an earlier experience as a journalist, which makes the book extremely readable. Naturally, both because of his own position as a member of the exchange and because of irritation with the very unjust and unintelligent criticisms which have been brought against the speculative market, his leaning is toward a minimizing of all the evils of speculation and a full presentation of its benefits. On the whole, however, he keeps a very sound balance

and the book may be heartily recommended for the soundness of its views as well as for its skill of presentation.

He has read somewhat widely both in the history of organized speculation and in the theories of economists regarding its functions, and quotes freely and pertinently from leading authorities. He scarcely attempts to elaborate an original theory of his own. The book, perhaps, would be somewhat stronger if in his earlier chapters on the function of speculation he had brought out more clearly the problem of risk in economic affairs and the way in which different risks have to be met by different methods. On the general theory, most of what he says is already familiar to those who are acquainted with the literature of the subject. His personal experience is better reflected in a chapter on cautions and precautions, in which he well points out many of the popular misunderstandings, and also in a very entertaining chapter called *The Day on 'Change*.

One might wish that from his personal experience he had discussed a little more fully the actual differences of opinion that prevail among members of the exchange as to just what kind of conduct is legitimate under their own code of ethics. He is quite justified in pointing out how much higher this code is today than it was twenty years ago and in holding that the exchange should be judged by its present standards. At the same time, there is a real difference of opinion between different elements in the exchange membership on many of these matters. One point where such difference occurs is regarding the practice of "making a market" for a new security by somewhat artificial manipulation. This is defended by some members of the exchange as a mere advertising of wares, and yet it is the present tendency of the best element in the exchange to look upon such practices with growing disfavor. The author discusses this question, but not quite so frankly or fully as interested readers would desire.

A useful chapter summarizes the history of the attempts to control speculative markets by legislation. In many ways the most valuable and original chapter of the book is that in which the author contrasts the practices of the London exchange and those of the New York Stock Exchange, in which he discusses the various points with clearness and force. His conclusion seems to be, regarding the most striking difference as to daily settlements versus fortnightly settlements, that the New York method tends to keep down extravagant speculation and to prevent insolvency,

while, on the other hand, it is largely responsible for the great fluctuations in the rates for call money. He suggests that a time may come when the New York Exchange will put in force a combination of a daily settlement of differences with a periodical delivery of stock; a suggestion of particular interest to the present reviewer since he made the same proposal nearly twenty years ago.

It may seem ungracious to criticize a minor matter in so admirable a book, but the reader is frequently surprised to see references to "Governor" White or "ex-Governor" White when the author is quoting from our oldest and best-beloved economist. To be sure another Horace White was governor of New York a few months after the resignation of Governor Hughes, but it is a somewhat discouraging commentary on fame in the field of disinterested public service that so intelligent a man as Mr. Van Antwerp should mix them up.

The book by Mr. Brace is much more difficult reading and more confused in its form of presentation. On the other hand, it is the more serious and original of the two. The first chapter or two are somewhat disappointing, dealing with the value, the history, and the features of organized speculation. It seems as if the author, by a different arrangement, could have brought out much more clearly the character of speculative transactions; and, frequently, somewhat simple matters which are quite essential to the understanding of the reader not familiar with what is being described are entirely omitted or left to be taken up later.

On the other hand, his chapters on the effect of speculation on prices and the indirect effects of speculation are original in treatment and show a great deal of careful thought. His conclusion regarding prices is that the tendency of speculation is not to lower the prices of products, as has been so commonly charged in recent attacks on the speculative markets, but rather to raise the prices of such commodities or securities as are dealt in on the organized exchanges. The reasons for this he thinks are threefold: first, the psychological fact that speculators are naturally bullish; secondly, the necessity of maintaining reserve stocks to make possible the delivery on short contracts; and, third, the interest of brokers to persuade the public that prices are going up, since an advancing market means large trading.

It is not possible to enter into an analysis of the author's contention in the limits of a brief review. The problem would have been made somewhat clearer if he had considered the difference

between producer's price and consumer's price. Unquestionably the speculative market brings these two prices nearer together and may have the effect of increasing the price to the farmer while diminishing the price to the consumer. His answer to the popular fallacy is thorough and convincing. He seems, however, to have gone somewhat too far in the opposite direction. None the less, what he has to say may be read with interest and care by the serious student of the question.

In the chapter entitled *Indirect Effects*, he challenges a theory of the present reviewer, frequently expressed and as frequently criticized, that the active participation of the outside public in the speculative market is necessary to give the market that breadth without which it cannot perform its proper function. He does this after careful thought and in the kindest manner. Although the reviewer is not convinced that his own position is incorrect, he freely recognizes the author's forceful presentation of the other view.

Dr. Von Reibnitz's study of the New York Stock Exchange does not require detailed notice. It covers little that is not perfectly familiar already to the American reader. It takes up the history of the stock exchange in relation to different panics, but makes no searching analysis. In fact, it does little more than chronicle the fluctuations of prices and the general market conditions of the time. His section on the economic service of the stock exchange to the United States adds nothing new. It is chiefly a statement of how large a part of the material wealth of the country is represented by transferable shares and the need of some market for them. In the book are to be found such exaggerated statements as that ninety per cent of all Americans speculate. His description of the organization of the New York Stock Exchange and the methods of dealing is satisfactory enough but brief.

A personal reference may perhaps be allowed. The writer of this review a few months after the panic of 1907 wrote a brief article, entitled *Some Lessons of the Panic*, for the "Yale Review." In this he enumerated a number of supposed causes to which the panic had been attributed by the yellow press, including the charge that it was purposely brought about by a few dominating financiers with the object of filling their own pockets through the general crash. This was then dismissed as being too absurd to be worthy of argument, and the real causes of the panic

were considered. Imagine his surprise on reading the following sentence on page 78 of this monograph: "Henry C. Emery, now chairman of the Tariff Board, calls their conduct a premeditated plot on the part of unscrupulous financiers to topple over the structure of credit for their own ultimate advantage." After that discovery he may perhaps be pardoned for refusing to recommend Dr. Von Reibnitz for strict accuracy.

Mr. Gibson's book is somewhat misleading in its title. In the first few pages he makes several sane remarks on the nature of speculation in general, but the bulk of the book is devoted to a consideration of the two factors which, in his opinion, are most influential in determining the course of speculative prices on the stock market. These are the condition of the crops and the condition of the money market. There is nothing very new in the discussions of either of these factors, but they contain suggestions which are interesting as coming from a veteran writer on these subjects, who is also a man of affairs. Even more interesting are the reflections of his experience in his chapters on stop-loss orders and mental characteristics. In general, he gives much sound advice to those who are inclined to tempt their fate in the speculative market, barring the advice to stay out altogether. In a chapter on the future of our railroad securities he takes a somewhat roseate view of the situation. It is rather surprising to find a writer of so much practical knowledge drawing conclusions from the fact that the average rate of interest on railroad bonds has fallen in the last twenty years. He gives the average rate for 1910 as 3.79 per cent. Prices of railroad securities for the future are not determined only by what they are now paying on money borrowed long ago, but rather by the rate they will have to pay in the future on money borrowed at the present time. The author seems to neglect this point entirely.

The little volume edited by Dr. Passow needs no comment. It is a convenient collection of documentary material for those who wish to refer first-hand to the German law regulating stock exchanges and the regulations and rules of various German exchanges themselves, including also one or two leading court decisions. The editor makes practically no comments on the material which he publishes.

H. C. EMERY.

Yale University.

Handbook of Municipal Accounting. Metz Fund Handbooks of City Business Methods. Prepared under the direction of WILLIAM H. ALLEN, HENRY BRUERE, FREDERICK A. CLEVELAND. (New York: D. Appleton and Company. 1913. Pp. xxx, 318. \$2.00.)

The publication of this book is one of the evidences of the great contribution the Bureau of Municipal Research has made not only to a knowledge of municipal conditions, but to an understanding of the way out of inefficient municipal administration. The first impression one gets of the book is surprise at the ratio between text and forms; for most earlier publications on municipal accounting have dwelt on tables and forms rather than on the principles which should underlie them. Here are 221 numbered pages, of which 207 are text. Besides the tables and forms given on the remaining 14 numbered pages, inserted leaves of forms are 34 in number. To those who believe that no accounting form exactly suitable to one circumstance is ever likely to be quite the best for any other, this seems as it should be. The authors of this book do not tell how to do things: they tell how to go to work to find how to do things. They know that rules of thumb and blind following of forms do not tend to produce good accounting, for the requisites of good work are analysis and judgment. They have accordingly shown how the universal accounting principles should be applied to municipal affairs and what municipal affairs are somewhat unique in the application of accounting principles.

In the main, the discussion of principles and their application is clear, and the forms are suggestive. Not always are the forms offered likely to serve their purpose, however, for the authors, in their desire to present figures for the layman, sometimes violate established accounting practice so much as to confuse, at least without careful study (which the forms were devised to render unnecessary), the reader familiar with accounts. This is in part due to the origination of terms that seem to the uninitiated almost purely arbitrary. Some of these are so little suggestive of their content that the reviewer, for one, has regularly since their publication in the "Journal of Accountancy," in 1910, found necessary a fresh memorizing of their significance whenever he has had occasion to interpret or use them. The system of accounting for estimated revenue, for authorizations to incur liabilities, for liabilities actually incurred, etc., is admirably worked out; but it is

unduly complicated in application by the arbitrary terminology used for designating accounts—such as “available balances” (p. 29) and “unapplied balances” (p. 30), for two accounts representing assets entirely unlike in nature. A debit to “estimated revenues” is sometimes (p. 40) a deficit, though by all the logic of terms and by definition it should be an asset (p. 40). Only a trained accountant could keep his head through these mazes. It is hoped that the plan will be simplified by its authors, for it accomplishes ideally, when consistently carried out, what is desired for watching income, appropriation, and expenditure.

A few extracts will show some of the important statements and will suggest the sanity of the book as a whole.

Comparison of costs, which is the great factor in determining and developing efficiency of administration, can be made only when the costs are reduced to a unit basis; that is, when the total cost for a period is divided by the number of units of work performed or other results (p. 6).

We therefore hold that the items in a balance sheet should be so classified that assets will be opposed by the liabilities which are to be met by them; for example, cash should be opposed by the immediate demands for cash, and uncollected taxes or other revenues receivable which may be pledged should be opposed by temporary loans made in anticipation of their collection (p. 21).

It is sometimes urged that permanent properties and bonded debt of cities should not be contrasted in balance sheet form for the reason that the former are never regarded as available for liquidating the bonded debt. . . . What is intended is to produce useful information about the results of past transactions in so far as they may affect the future. . . . Since a heritage of debt has been provided, it is but just that the heritage of useful properties acquired may also be definitely known. So far as the future taxpayer is concerned the capital account balance sheet is a summary of inventories of debts and properties inherited. . . . The property account lays the foundation for audit of sales, condemnations, demolitions, losses, and other mortality returns; it lays the foundation for actuarial data pertaining to ‘upkeep’ over a period of years; it gives a basis for establishing reserves for ‘depreciation’ (pp. 47-53).

It is regrettable that the authors contribute to the haziness regarding certain accounting terms, whereas they might help to give added definiteness. They use the term “reserve” in three senses—for surplus (p. 137), for deduction from assets (p. 56), and for liabilities (p. 66); and yet these things are wholly unlike.

Typographically the book is not pleasing, for boldface type is used in the text both for emphatic words and for names of ledger accounts. Sometimes one is puzzled to know which purpose is

served, and some pages literally bristle (pp. 68, 69). The index is remarkable—95 pages for 221 pages of text. Some long phrases are indexed under virtually each word, as "Coöperation of officials necessary for reorganization," indexed under four heads—coöperation, financial officers, public officers, reorganization. Some mere index titles occupy three full-page lines. One topic reads, "'Red tape', defined"; and yet the sentence indexed does not attempt to define red tape. Most purchasers of books do not care to pay for indexing of this excessive type. The index-maker has done his best to make the book appear bromidic; but it is full of good things and suggestive.

WILLIAM MORSE COLE.

Harvard University.

Elements of Accounting, Theory and Practice. By JOSEPH J. KLEIN. (New York: D. Appleton and Company. 1913. Pp. xiv, 422.)

The author of this work is a member of the faculty of New York University School of Commerce, Accounts and Finance, and his work there, together with the assistance he has received from many whose names are familiar to the accounting profession, has enabled him to produce a text which goes far toward attaining the purpose sought, namely, "to bridge the gap between book-keeping and accounting." Presupposing on the part of the student a knowledge of debit and credit, he first discusses the principles of bookkeeping as applied in the ordinary books of account, and then shows how, by the application of accounting principles, some of the important accounts and books may be rearranged to secure better results. Next follow three chapters on single versus double entry, partnership accounting, and corporation accounting, respectively; after which there naturally comes the preparation of final statements according to the most approved modern practice. The difficult subjects of depreciation, reserve, sinking fund, and investment accounting, which are closely associated with the proper financing of most enterprises, are treated and illustrated in such a way as to render them readily comprehensible. A section, unique in works of this character, is devoted to the accounts of non-trading concerns, following which a clear elucidation is given of the statement of affairs and deficiency account and the realization and liquidation account. The two succeeding chapters, comprising but 30 pages, on the theory of cost accounts, and the final chapter, of only 34 pages, on auditing, are

inadequate to *introduce* the student to these broad and intricate subjects. Each chapter closes with appropriate problems and a bibliography; and, in the appendixes, the large number of supplementary exercises, questions, and problems, mostly taken from C.P.A. examination papers, furnish abundant material for tests.

Each step in the work is amply exemplified by concrete problems, so that not a single point is left in the dark. This, in such a subject, is highly commendable, and is in strong contrast to the work by Racine recently noted in the *REVIEW* (vol. III, p. 658). Moreover, the discussion of important issues, while purposely definite and authoritative, is by no means dogmatic, and it is constantly reiterated that there are other solutions for problems than those given by the author. He freely allows some elasticity in the matter of the forms of record, and is just as free to acknowledge that there is no royal road by which alone correct results may be secured.

But there are some things in this notably meritorious work which call for adverse comment. The "substitution device" (p. 4) is useless or confusing. The making of only two classes of accounts, real and nominal (p. 21), is unscientific; because expense, for instance, is just as much a *thing* as merchandise, inasmuch as coal, stamps, and office stationery are as much things as are goods and notes. Again, to call merchandise account a real account, and purchases account a nominal account (pp. 24-25), is to attempt to make a difference where no difference exists, for they both represent goods; and, worse than that, to add the amount of the real account to the amount of the balance of the nominal account, so-called, would be to get something indefinite, composite, as a result. In this connection, also, is there any sense in calling merchandise inventories tangible things, while purchases and sales and return purchases and return sales of merchandise are not tangible things (p. 23)? It is of very doubtful validity to separate the trading and the administration section of the trading and profit and loss statement (pp. 171-172); for example, advertising, salaries of salesmen, and selling expenses are just as much administration expenses as are office salaries and office repairs.

To accomplish the author's purpose, students should already have a fairly good knowledge of bookkeeping before beginning this work, or else should be given more practice in modern methods of recording during their study of this text. It is as impossible to secure thorough accountants without their first having an accurate

and instantaneous knowledge as to the actual methods of keeping accounts, as it is to expect skilful engineers to result from the theoretical study of technical engineering subjects without the necessary practice in shop, factory, or field. But, all in all, this is probably the simplest and best text that has yet appeared for the purpose it is intended to serve.

W. T. JACKMAN,

University of Vermont.

Regulation, Valuation and Depreciation of Public Utilities. By SAMUEL S. WYER. (Columbus, O.: The Sears and Simpson Company. 1913. Pp. 313. \$5.00.)

Engineering Valuation of Public Utilities and Factories. By HORATIO A. FOSTER. (New York: D. Van Nostrand Company. 1912. Pp. xvi, 345. \$3.00.)

Mr. Wyer offers his book as an "unbiased discussion and concise compilation of the pertinent economic, engineering and legal facts" pertaining to public utilities. With the exception of the first two chapters dealing with introductory matters and definitions, and chapters 14, 15, and 16, presenting respectively technical engineering data, reference tables, and a selected bibliography, the volume is devoted to three general subjects: (1) the economics of public utilities, describing the nature of the different services, especially in reference to costs, prices, and rates, (2) the principles underlying the regulation of public utilities, and (3) the valuation of utility properties, especially for rate-making purposes. Much of the subject-matter in all the chapters is technical. The book is perhaps more a "compilation" than a "discussion," presenting almost throughout *facts* merely as such, with little regard to their interrelation and their economic significance. The chapters on regulation and valuation consist largely of concise and pointed citations from court decisions. In a few instances the *facts* appear more absolute than they actually are. Citations from federal and state courts, and even from state commissions, are used to present general principles. This cannot be done safely unless the views presented have been specifically affirmed by the Supreme Court of the United States. Thus the view in paragraph 289 (p. 95), that the states may not substantially burden interstate commerce (taken from *Shepard v. N.P. Ry. Co.*, 184 Fed. 775), was definitely overruled in June, 1913, by the decision of the Supreme Court in the Minnesota rate cases. Again, it is extremely doubt-

ful whether the principle followed by the Wisconsin Railroad Commission would be supported by the Supreme Court, namely, that "going value must be considered in fixing rates" and that "going value may be capitalized" (p. 179). For the most part, however, the volume has been carefully and well prepared and serves its purpose excellently—as a handbook of useful information, not an economic treatise.

Mr. Foster is an engineer with considerable practical experience in valuing public service and factory properties. He has attempted in his book a twofold task: (1) to explain the principles that are and should be followed in the valuation of properties, especially for rate-making purposes, and (2) to outline forms and procedure in an actual valuation. He has succeeded far better in the second; and chapters three, four and five, dealing with those matters, will be useful to any one interested in the practical aspects of an appraisal. The forms are taken principally from the joint engineering department of the Wisconsin Tax and Railroad Commissions, and they cover more especially railroad, street railway, telegraph and telephone, water works, gas and power properties. The book consists of fifteen chapters, an introduction, a selected bibliography, and an index.

Mr. Foster upholds the doctrine that a valuation for rate-making purposes should equal the cost of reproduction new at the time of the appraisal, less depreciation to cover the wear and tear of the existing property, plus going value. The last represents an allowance made for the difference between the mere existence of physical plant and such plant in actual operation, with the established reputation and connections of the property that is being valued. The author apparently favors the rule of the Wisconsin Railroad Commission, that "the actually reasonably wise expenditure of money towards getting the business of the plant established may be included in the value to be allowed for the purpose of fixing rates" (p. 142). This view has been followed more or less definitely by several federal and state courts, and Mr. Foster seems to present it as a generally accepted doctrine in the regulation of American utilities. While state commissions undoubtedly may follow this rule if they wish, they probably are not under constitutional obligation to do so. The matter has never been specifically determined by the Supreme Court of the United States. However, in the recent Minnesota rate cases, while the cost-of-reproduction principle was apparently approved,

the court refused to allow certain special additions, which were not much unlike the idea of going value.

Mr. Foster's book should prove fairly useful to anyone reasonably familiar with public service matters: it teems with quotations from well-known writers, court decisions, and reports of commissions, and so offers a multitude of good suggestions. But, to laymen, especially to engineers not trained in economics, it would probably serve more to confuse than to enlighten. The point of view is often unclear, and the subject-matter is ill-digested. There is little logical sequence either in the order of chapters or in the passage from one idea to another. Chapter lengths vary from such extremes as a single page, two, four, and five pages to seventy-two and ninety pages. Quotations are not only too numerous and long, but their purpose is often obscure and in a number of cases they are needlessly repeated. The author delights in definitions, but is not very fortunate in making them lead anywhere.

JOHN BAUER.

Cornell University.

A Short History of Accountants and Accountancy. By ARTHUR H. WOOLF. (London: Gee and Company, Ltd. 1912. Pp. xxxi, 254. 7s. 6d.; New York: The Ronald Press Company. 1912. \$2.75.)

This is a revision of a series of articles first published in "The Accountant." The general title differs only slightly from that adopted by R. Brown, the editor of a similar series of essays by prominent Scottish and English accountants. Further comparison shows that Woolf's work is not unlike Brown's in chapter titles and in the arrangement of material. There are other analogies.

On the other hand, Woolf's work has been independent of any one authority. It relies largely upon secondary authorities, to be sure, but these include a large number of English, Italian, and French writers, and they have been used discriminatingly. Brown is frequently cited, as is also Sieveking, the standard German authority, but neither has been unduly relied upon. The work is therefore essentially Woolf's own, and represents a distinct contribution to the literature of economic history and of accounting (we can hardly say of "accountics," although Woolf supposes this to be an American expression).

As might be expected, the information respecting accounting in

antiquity is fragmentary. For Egypt, our knowledge relates to the activities of the scribes of crown lands and the scribes of royal revenues. For Babylonia, also, we have a description of the fiscal organization, and, in addition, certain commercial transactions are described. For Greece, the description is amplified by a relation of the duties and activities of the farmers of revenue, of the government auditors, and of the bankers. For Rome, we have, in addition, the household expense books which are especially significant in the history of accounts, since, although incomplete, they begin to look like our account books.

For the so-called Dark Ages, the church furnishes the most characteristic accounts. Woolf also gives us a description of Charlemagne's *Capitulare de Villis*, but here he is disappointingly brief. A chapter of a dozen pages is devoted to the English exchequer; this is followed by one on accounting in England from the eleventh to the fifteenth century, which includes brief descriptions of the Domesday Book, the Hundred Rolls, the Wardrobe accounts, manorial accounts, and those of religious houses, private households, and livery companies. In the next chapter, dealing with the corresponding period on the continent, we find the first trace of merchants' account books.

Part II treats of the growth of the science of bookkeeping. Its most interesting chapter is that describing the work of Paciolo. Part III consists of a single chapter sketching the history of auditing, but not embracing modern auditing. Part IV has a chapter on early accountants in Italy, and three on accountants in Great Britain.

Notwithstanding the work of Sieveking and that of Brown and his associates, there is still room for the book under review, which hardly alters the situation. We still need a more thorough, more complete, and more technical history of accounting; in other words, we need a work which is frankly and successfully ambitious. Woolf's book is not ambitious. As a brief sketch it is admirable. It is trustworthy and it is interesting.

A general thesis frequently maintained in the book is that accountancy is a mirror which accurately measures "the stage of culture and development attained by a community." Such generalization is fascinating. Better still, the suggestion is worth careful consideration. If true, it adds immensely to the significance of accounting in the study of economic history. The reviewer fears, however, that the statement is true only with numerous and important qualifications.

One of the most useful features of the volume is the bibliography prepared by Cosmo Gordon, librarian of the Institute of Chartered Accountants in England and Wales. It is compiled from books in the library of the Institute, supplemented by entries from Brown, Eldridge, Reymondin, and other bibliographical sources. The titles are arranged chronologically, beginning with the work of Paciolo (1494), and extending to the year 1800.

WILLIAM H. PRICE.

Imperial University of Tokyo.

NEW BOOKS

BEHM, P. *Der Handelsagent. Seine soziale Stellung und volkswirtschaftliche Bedeutung.* (Berlin: Siemenroth. 1913. Pp. ix, 202. 5 m.)

BEXELL, J. A. and NICHOLS, F. G. *Principles of bookkeeping and farm accounts.* (New York: American Book Co. 1913. Pp. 184. 65c.)

BIVINS, F. J. *The farmer's political economy. "The dead horse in our spring ranch." Farmer Dan Luke's exposure of cotton marketing.* (Macon, Ga.: Randall Prtg. Co. 1913. Pp. 89. \$1.)

BRANDE, J. *Die Vereinigung der Berliner Mitgleider des Börsenvereins 1888-1913.* (Berlin: R. L. Prager. 1913. Pp. viii, 144. 3 m.)

BRISCO, N. A. *Economics of business.* (New York: Macmillan. 1913. Pp. xiv, 390. \$1.50.)
To be reviewed.

CROAD, H. J. *Bond values according to the life insurance law of Massachusetts.* (New York: Spectator Co. 1912. \$7.50.)

GERSON, O. *Organisation, Statistik und systematische Kontrolle in kaufmännischen Betrieben.* (Hamburg: P. Babst. 1913. Pp. viii, 195. 8.50 m.)

HAWKINS, R. H. *Notes on real estate in western Pennsylvania.* (Toledo, O.: Toledo Legal News Co. 1913. Pp. 200.)

HEYLIN, H. B. *Buyers and sellers in the cotton trade.* (Philadelphia: Lippincott. 1913. Pp. 234. \$3.)

JOHNSON, G. *Manufacturing book-keeping and costs.* (London: Pitman. 1913. Pp. 124. 3s. 6d.)

KOESTER, F. *The price of inefficiency.* (New York: Sturgis & Walton. 1913. \$2.)

LEWIN, C. M. *Industrielle Organisationspraxis.* (Leipzig: C. E. Poeschel. 1913. Pp. 131. 5.50 m.)

LUCE. *Fonds und Effekten der Bremer Börse.* (Bremen: Bremer Zeitungs-Gesellschaft. 1913. 3.75 m.)

MACFARLAND, G. A. and ROSSHEIM, I. D. *A first year in bookkeeping*

- and accounting. (New York: Appleton. 1918. Pp. viii, 227. \$1.50.)
- MARDEN, O. S. *Training for efficiency*. (New York: T. Y. Crowell Co. 1913. Pp. ix, 360. \$1.25.)
- PEREIRE, G. *Essai sur une comptabilité des chemins de fer*. (Paris: Alcan. 1913. 1 fr.)
- POWERS, O. M. *Theory of bookkeeping*. (Chicago: Metropolitan Text-Book Co. 1913. Pp. 125. \$1.50.)
- REDFIELD, W. C. *Business in the public mind*. Sen. Doc. 37, 63 Cong., 1 Sess. (Washington: Gov. Pr. Off. 1913. Pp. 10.)
- RICE, G. G. *My adventures with your money*. (Boston: R. G. Badger, 1913. Pp. 363. \$1.50.)
- RICHARDSON, A. P., editor. *The influence of accountants' certificates on commercial credit*. (New York: Am. Assoc. Pub. Accountants. 1913. Pp. 9, 99. 50c.)
- THORNTON, F. W. *Brewery accounts*. (New York: Ronald Press Co. 1913. Pp. x, 102. \$2.)
- TOVEY, P., editor. *Pitman's dictionary of secretarial law and practice*. (New York: Pitman. 1913. Pp. 15, 757. \$10.)
- WILLISTON, S. *Lectures on commercial law and the law of negotiable instruments*. (Boston: Wright & Potter. 1913. Pp. 250. \$5.)
- WINCHELL, S. D. *The model system of bookkeeping and cost finding, prepared especially for the printing and allied industries*. (Philadelphia: T. A. Winchell. 1913. \$10.)
- WOOLF, A. H. *The stock exchange, past and present*. (London: Accountant. 1913. Pp. ix, 125. 2s. 6d.)
- *Analyses of the railroad corporations whose bonds are a legal investment for Massachusetts savings banks*. (Boston: Old Colony Trust Co. 1913. Pp. 707.)
- *The land-title registration act of the state of New York*. (Buffalo, N. Y.: Otto Ulbrich Co. 1913. Pp. 72. 50c.)
- *Uniform system of accounting for cities of the second class*. (Albany, N. Y.: Comptroller's Office. 1912. Pp. 116.)

Capital and Capitalistic Organization

NEW BOOKS

- EBNER, G. *Die Kartellgeschichte der deutschen Röhrenindustrie*. (Berlin: Deutscher Montan-Bund. 1 m.)
- FLECHTHEIM, J. *Deutsches Kartellrecht*. Vol. I. *Die rechtliche Organisation der Kartelle*. (Mannheim: Bensheimer. 1913. Pp. vi, 214. 5 m.)
- FAS, E. *Die Berücksichtigung der Wertverminderungen des stehenden*

- Kapitals in den Jahresbilanzen der Erwerbswirtschaften.* (Tübingen: H. Laupp. 1913. Pp. vii, 132. 4 m.)
- GOERRIG, R. *Der Tabaktrust und seine Gefahren für Deutschland.* (Dresden: F. C. Boden. 1913. Pp. 38. 0.20 m.)
- HANEY, L. H. *Business organization and combination.* (New York: Macmillan. 1913. Pp. 483. \$2.)
To be reviewed.
- JENKINS, C. A. *Humanite society. The power of money to control. Indirect taxation. Transportation. Land. Money. Trust centralization.* (San Francisco: Eastman & Co. 1913. Pp. 87. 50c.)
- LIEFMANN, R. *Beteiligungs- und Finanzierungsgesellschaften. Eine Studie über den modernen Kapitalismus und das Effektenwesen in Deutschland, den Vereinigten Staaten, der Schweiz, England, Frankreich, und Belgien.* Second edition, enlarged. (Jena: Fischer. 1913. Pp. xiv, 626. 16 m.)
- MARIA, P. *Des modifications du capital social au cours de la vie sociale dans les sociétés commerciales par actions.* (Paris: A. Rousseau. 1913. 8 fr.)
- MULLIGAN, J. T. *Law of corporations.* (Chicago: T. H. Flood & Co. 1913. Pp. ix, 594. \$5.)
- PEYROUTEN. *Les monopoles en Indo-Chine.* (Paris: E. Larose. 1913. 4 fr.)
- POND, O. L. *A treatise on the law of public utilities operating in cities and towns.* (Indianapolis: Bobbs-Merrill Co. 1913. Pp. liv, 954.)
To be reviewed.
- RAMORINO, A. *La borsa: sua origine, suo funzionamento.* (Bari: G. Laterza e figli. 1912. Pp. 98. 2 l.)
- SINGER, J. *Das Land der Monopole: Amerika oder Deutschland.* (Berlin: Siemenroth. 1913. 8 m.)
- YOUNG, E. H. *Foreign companies and other corporations.* (New York: Putnam. 1912. Pp. 332. \$4.)
- *The land hunger: life under monopoly.* With an introduction by MRS. COBDEN UNWIN and an essay by BROUGHAM VILLIERS. (London: Unwin. 1913. Pp. 234. 2s.)
- *The United Railways and Electric Company of Baltimore; history and description of property and securities.* (Baltimore, Md.: A. Brown & Sons. 1913. Pp. 38.)

Labor and Labor Organizations

- American Syndicalism. The I.W.W.* By JOHN GRAHAM BROOKS. (New York: The Macmillan Company. 1913. Pp. 264. \$1.50.)

This is a book for the open-minded citizen rather than for the

special student of organized labor. It is not a systematic, technological study of syndicalism and the I.W.W., but rather an attempt to show the general characteristics and the social significance of the syndicalistic movement and to indicate the attitude which society ought to take toward it.

Syndicalism, in the view of the author, is a general attitude, tending to manifest itself functionally and organically wherever workers have been denied or have lost faith in the more usual methods by which redress and betterment are sought by them. The deepest causes of it are economic, but its most obvious and proximate origin lies in frustrated hopes. It is immediately the outgrowth of the rage engendered by disappointment in the results of reform, trade unionism, and socialism. Practically it is destructive and anarchistic. Whatever constructive theory it voices is utopian. Its methods and ideals are, therefore, socially false and ineffective, for only by the constructive coöperation of social groups can we hope for general and permanent betterment. Nevertheless, it is not for us to condemn and ignore syndicalism. It exists because of certain things intolerable in our present system, and until these are cured we shall never stop or lessen its force. Moreover, it is not an unmixed evil: "There is much in its motive to command our respect"; it is a useful instrument in rousing sluggish social intelligence and conscience, and it has possibilities of constructive development. If, under these circumstances, "we are to create a saving statesmanship, it must have first of all the courage of open-mindedness willing to listen even to the I.W.W.; to know their leaders; yes, even to work with them rather than contemptuously and excludingly to work against them."

The whole book breathes a spirit of toleration and broad social sympathy without becoming mawkish or giving countenance to the class hatred and violent and destructive tactics of the syndicalists, but it voices unequivocally the sentiment that, if we are to escape the growth of these ideas and tactics, capital must be made to forego its autocratic exclusiveness and prerogatives, and labor must be allowed to share in the management of industry. Industrial peace and social welfare are to be purchased only by progressive inauguration of a coöperative régime. There must be "the open, declared purpose to admit labor to management, first at safe and possible points with all that this means of banished secrets; to admit it fearlessly and with no reserves as far as labor

proves its fitness; we then and there connect ourselves with the coöperative régime."

This general argument runs through the nineteen chapters of the book. The first five are devoted to the establishment of the author's general viewpoint; the next eleven to the general characteristics, various activities and proposals of syndicalism considered in this light; the final three, to the social function of syndicalism and to our own social duties in regard to it.

In a book of this kind, written primarily to establish a social viewpoint and to point a social moral in connection with syndicalism, the technical student of the I.W.W. will find much to criticise. He will object to the off-hand, unproved identification of I.W.W.-ism with syndicalism: he will hesitate to accept the idea that "syndicalism was a propelling force in the meteoric career of the Knights of Labor"; he will be disappointed with the meager, unsystematic, and perhaps at times, erroneous, treatment of the genesis and specific character of the I.W.W.; he will probably reject the general method of the whole book where the matter of fact statements are used mainly for illustrative purposes or as texts for general social speculation. Nevertheless, even the technical student cannot doubt the author's remarkable grasp of the essential character, spirit, and tendencies of I.W.W.-ism and the general labor and socialistic movement with which it is bound up. Mr. Brooks has produced a volume which the intelligent student of labor problems will read through with increasing interest and respect.

R. F. HOXIE.

University of Chicago.

The Minimum Wage and Syndicalism. By JAMES BOYLE. (Cincinnati: Stewart and Kidd Company. 1913. Pp. 136. \$1.00.)

In this "independent survey of the two latest movements affecting American labor," no attempt is made to consider the two movements in connection with each other. The body of the text is a reprint of articles which appeared in successive weekly issues of the "Cincinnati Enquirer" from February 9 to April 16, 1913. A large portion (85 pages) is devoted to a discussion of the minimum wage. The author passes in brief review the experiments of New Zealand, Australia, and England, and sketches the beginning of the movement in the United States. He is familiar with the best authorities on the subject, but gives no evidence of having made

any original investigations. He reproduces the opinions of various students of the question, such as Professors Seager and Holcombe, Beatrice and Sidney Webb, Dr. Clark, and others, but arrives at no other conclusion of his own on this "serious and complicated problem" except that for the present a "Scotch verdict" is all that can be given.

Mr. Boyle, though favorably disposed towards reform, is evidently in fear that the minimum wage is the first step on the road to state socialism which may lead further to full collectivism. After that Mr. Boyle sees terrifying visions—"the deluge!—socially, politically, and economically" (p. 84). No wonder that if Mr. Boyle is terror stricken by socialism, he can find no words strong enough to express his horror of syndicalism. In fact, what can be expected of a movement which is not "indorsed by a single recognized authority on politics or economics"? Evidently, it is but a "hysterical phenomenon, something similar to the outbreaks of the militant branch of the British suffragettes"—and what can be worse than that?

In contrast with the interpretation of syndicalism, Mr. Boyle's description of its main ideas is accurate and well worded. In a very few pages he has succeeded in presenting a very good succinct statement of syndicalist principles and of the points of difference between syndicalism and socialism. Points 8 and 9 on page 91, however, should have been made clearer. The reader is at a loss to say whether the syndicalists want each industrial group to possess the means of production or simply to use them under the control of society. The wording of point 8 expressly affirms the former; point 9 implies the latter statement. As many writers have been misled, it may be well to repeat here that the fundamental idea of syndicalism is the social ownership of the means of production; the labor unions are conceived in the future as managers and directors of industry.

LOUIS LEVINE.

History of Work Accident Indemnity in Iowa. By E. H. DOWNEY. Iowa Economic History Series. (Iowa City: The State Historical Society of Iowa. 1912. Pp. xiii, 337.)

Dr. Downey has presented his material as follows: The need of indemnity, genesis of employers' liability, analysis of the same, its practical working, accident indemnity abroad, indemnity legislation in the United States, the Iowa Employers' Liability Commission, and some standards of indemnity legislation. The book

is rather inappropriately named, for it neither confines itself to Iowa nor is it sufficiently extended to be a history of indemnity elsewhere. It might well be characterized as a sane, broadminded, progressive treatise intended to influence and to guide compensation legislation. As such a treatise it is a successful piece of work. The book, however, shows some gaps and lapses. The author is unduly pessimistic about the future number of accidents, when he declares that even in Germany work accidents are increasing both absolutely and relatively as industrial development goes forward (p. 3). His own authority (*Bulletin of the Bureau of Labor*, No. 92) makes it clear (p. 15) that the apparent increase is accounted for by statistical changes. It is, furthermore, well known that the safety movement in this country is showing marked results.

A few additional points against liability might well have been brought out by a treatment of the cost to the employer of claims paid as a matter of humanity or to keep the good will of labor, or of the consumer; the payments extorted by blackmail or through perjury; the distinct moral advantages of compensation, and the great social interest in compensation as a substitute for liability. In taking a positive stand for compulsory compensation, Dr. Downey fails to accord Minnesota its due praise for this principle, which has been referred to as "the Minnesota idea" and much urged by Hon. H. V. Mercer. By a law of 1910, New York put the burden of proving contributory negligence on the defendant employer (*Bulletin of the Bureau of Labor*, No. 91, p. 1092, sec. 202-209); consequently this idea of reversal of the burden of proof could not have originated with the Iowa commission (*Laws, 1911*), as stated by Dr. Downey (p. 171). The author might be criticised for failing in his condemnation of British compensation to praise the Britains for their provision for occupational diseases. No enthusiast for the civilized principle of compensation should forego an opportunity to declare the diseases of industry to be in the same class with the accidents. The industrial disease is simply the industrial accident in smaller, successive doses.

The author declares for exclusion of all remedies other than compensation, except where the employer has violated a safety law (p. 172). He stands for state insurance or for employers' mutual associations (p. 168). Here he is not convincing in asserting that through such insurance the cost of compensation can be more easily and certainly shifted to the consumer. Further-

more, it must be conceded that liability companies may possibly be brought so strictly under state regulation as both to afford reasonable cost for insurance and to effect reductions in accidents. It may be questioned, too, whether a free choice of physicians by workers would lead to quackery (p. 187). The author makes a good point for his favored plans of insurance by suggesting the economy of such plans and their advantage in allowing assessment insurance. Contributions by workers are condemned, but the advantages of the German system are praised. The book likewise condemns the maximum weekly limit and the time limit of so many weeks or years in paying benefits (pp. 187 ff.). Dr. Downey deals effectively with the time-worn fear of interstate competition (p. 190).

Wisconsin is deservedly praised for its administrative board legislation, but its plan borrowed from Germany of tripartite cooperation among state, employers, and workers, indispensable to successful drafting and administering of labor laws, is not sufficiently emphasized; nor is Minnesota given its due share of praise for the large part that it has played in the compensation movement through the compensation work started in the Minnesota Bar Association in 1908 by Hon. Pierce Butler, through Governor Johnson's commission, and through the agitation of Hon. W. E. McEwen and the Minnesota State Federation of Labor.

Limitations of space forbid discussion of Dr. Downey's plan for a commission representing labor, capital, and the law.

RAYMOND V. PHELAN.

University of Minnesota.

NEW BOOKS

ARNDT, P. *Die Heimarbeit im rhein-mainischen Wirtschaftsgebiet.* Vol. III, Part I. (Jena: Fischer. 1913. Pp. 260. 4.20 m.)

BERNHARD, E. *Die Vergebung der öffentlichen Arbeiten in Deutschland im Kampf gegen die Arbeitslosigkeit.* Schriften der deutschen Gesellschaft zur Bekämpfung der Arbeitslosigkeit, 1. (Berlin: Heymann. 1913. Pp. vii, 55. 2 m.)

BOYLE, J. *The minimum wage and syndicalism.* (Cincinnati, O.: Stewart & Kidd Co. 1913. Pp. 136. \$1.)

COHEN, H. *Trade union law.* Third edition. (London: Stevens & Haynes. 1913. 7s. 6d.)

DEWAVRIN, M. and LECARPENTIER, G. *La protection légale des travailleurs aux Etats-Unis, avec exposé comparatif de la législation française.* (Paris: Rivière. 1913. Pp. 348. 8 fr.)

- ECKARDT, P. *Abriss der Weltwirtschaftskunde.* (Bielefeld: Velhagen und Klasing. 1913. Pp. x, 140, illus. 2.30 m.)
- FULLER, H. B. *The law of accident and employers' liability insurance.* (Kansas City, Mo.: Vernon Law Book Co. 1913. Pp. xii, 503, 22, 38. \$5.)
- GROUSSIER, A. *La convention collective du travail.* (Paris: Dunod & Pinat. 1913. Pp. 406. 5.50 fr.)
- LABATT, C. B. *Commentaries on the law of master and servant, including the modern laws on workmen's compensation, arbitration, employers' liability, etc.* Five volumes. Second edition. (Rochester, N. Y.: Lawyers Coöperative Pub. Co. 1913.)
- LEWIN, D. *Der Arbeitslohn und die soziale Entwicklung.* (Berlin: Springer. 1913. Pp. vii, 206. 4 m.)
- MALEGUE, J. *Une forme spéciale de chômage. Le travail casuel dans les ports anglais.* (Paris: A. Rousseau. 1913. Pp. 320. 8 fr.)
- MITCHELL, J. *The wage earner and his problems.* (Washington: P. S. Ridsdale. 1913. Pp. 186. \$1.)
- POUGET, E. *Sabotage.* Translated from the French with an introduction by ARTURO GIOVANNITTI. (Chicago: Kerr. 1913. Pp. 108. 50c.)
- The national convention of the Socialist party of America in 1912 resolved to expel any member who advocated sabotage. A number of socialists were opposed to this pronouncement and the struggle between the defenders and the opponents of sabotage has furnished the occasion for the publication of this translation of Pouget's well-known defense of sabotage. The booklet is addressed to the workers already in sympathy with syndicalism and is designed to allay any qualms which they may have in the employment of sabotage, as well as to furnish examples of its successful use which may prove stimulating to the ingenuity of the reader. G. E. B.
- RAMBOUSEK, J. *Industrial poisoning from fumes, gases and poisons of manufacturing processes.* Translated and edited by T. M. LEGGE. (New York: Longmans. 1913. Pp. xiv, 360. \$3.50.)
- REICHESBERG, N. *Der internationale Arbeiterschutz in den letzten 12 Jahren.* (Bern: M. Drechsel. 1913. Pp. 58. 1.80 m.)
- ROBINSON, M. F. *Trade and labour association. The spirit of association. Being some account of the guilds, friendly societies, coöperative movement, and trade unions of Great Britain.* (London: Murray. 1913. Pp. xii, 403. 6s.)
- ROWNTREE, B. S. and RENDALL, M. *How the labourer lives. A study of the rural labour problem.* (London: Nelson. 1913. Pp. 342. 2s.)
- SANDFORD, T. J. *The laborers' catechism, the open road to the new Utopia.* (St. Paul, Minn.: Society of the True Republic. 1913. Pp. 140, illus. 50c.)

SCHMIT, E. *Organisation des bureaux de placement municipaux et situation des ouvriers agricoles étrangers en Allemagne.* (Paris: A. Rousseau. 1913. 5.50 fr.)

STOWELL, C. J. *Studies in trade unionism in the custom tailoring trade.* Thesis submitted in partial fulfillment of the requirements for the degree of master of arts in economics, University of Illinois. (Bloomington, Ill.: Journeymen Tailors' Union of America. 1913. Pp. 166.)

In his preface Mr. Stowell says, "The paper here submitted is intended to form the basis for a more extended study of trade unionism in the custom tailoring trade. . . . The writer was employed in the general office of the Journeymen Tailors' Union of America from 1902 to 1911 and has had opportunity to study the organization and policies of the union."

The early history of the clothing industry is traced rapidly. There was a tailor with the first Jamestown expedition in 1607; the greatest development in the ready-made industry has taken place since the revolutionary invention of the sewing machine in 1846; by 1865 the custom trade assumed much of its present form. In the description of methods of production the author sketches briefly the problems of home work and private shops, and concludes that "practically all of the evils of 'seasonal' trades are rampant in this one; long hours and crowded work in some periods, and in other periods virtually none. The number of hours that a tailor will put in during the rush season is limited only by his endurance. Twenty-four hours on a stretch is not unknown, and twelve to eighteen hours is very common." And all of this when "custom tailoring of the better grade is distinctly a luxury."

Brief mention only is made of early strikes and conspiracy trials and of The Journeymen Tailors' National Trades Union which was a considerable factor in the movement during the twelve years, 1865-1877. Only one page is given to "The Tailors" and the Knights of Labor. The remainder of the volume is devoted to the statistics of the Journeymen Tailors' Union of America, 1883-1911, with special tables on strikes and wages. The chronological history of the present organization is not sketched beyond the year 1887.

JOHN B. ANDREWS.

VAN SCHAACK, D., editor. *Safeguards for the prevention of industrial accidents.* (Hartford: Aetna Life Ins. Co. 1913. Pp. 187. 50c.)

ZITZLAFF, J. *Arbeitsgliederung in Maschinenbau-Unternehmungen.* Sammlung nationalökonomischer und statistischer Abhandlungen des staatswissenschaftlichen Seminars zu Halle, 69. (Jena: Fischer. 1913. Pp. v, 58. 2 m.)

Industrial agreements enquiry. Report of the Industrial Council, 6952. *Evidence,* 6953. (London: King. 1913. 3d.; 5s. 4d.)

Labour and industry in 1913. (London: J. Murray. 1913. Pp. 102. 1s.)

— *Enquête sur le travail à domicile dans l'industrie de la fleur artificielle.* (Paris: Berger-Levrault. 1913. Pp. xi, 426. 3.90 fr.)

— *La réglementation du travail dans les usines à marche continue. Rapport de F. Fagnot à l'association française pour la protection légale des travailleurs.* (Paris: Alcan. 1913. Pp. 121. 1.50 fr.)

— *Die Gewerkschaften im Lichte der Volkswirtschaftslehre.* (Cöln: Christl. Gewerkschafts-Verlag. 1913. 0.30 m.)

Money, Prices, Credit, and Banking

Money-Changing. An Introduction to Foreign Exchange. By HARTLEY WITHERS. (New York: E. P. Dutton and Company. 1913. Pp. viii, 183. \$1.75.)

Mr. Withers is already familiar to us as the author of the popular but valuable essays on London finance known as the *Meaning of Money* and *Stocks and Shares*. *Money-Changing*, which attacks the somewhat more technical subject of the foreign exchanges, is the outgrowth of a series of lectures on exchange delivered before the Institute of Bankers (an English organization). It is characterized by that lightness of touch and fluency of style shown by the author in his earlier works on topics usually regarded as dry. Says the author himself, "it was a proud moment in my life when, in lecturing on foreign exchange, I was rewarded with hearty laughter from my audience, and I mention the fact as an encouragement to any reader who may be shivering on the brink of this treatise" (p. 1). An acceptable amount of jocular comment is sprinkled through the text. "Miss Potter of Texas" marries a duke and her fortune is transplanted to England. One will hardly object, I suppose, to the slight stretching of terms involved in Mr. Withers's explaining the influence of this operation on the exchanges, as an instance where England makes an export—namely, an export of social position (p. 137). Nor will any of us in America quarrel with the illustration in which a sterling bill drawn in France against a shipment of champagne is supposed to be used to discharge a debt to an English exporter of rhubarb, partly because it is probable anyway that much champagne is made out of English rhubarb (p. 94).

Money-Changing is of approximately the same length and general scope as Mr. Franklin Escher's *Elements of Foreign Exchange* and Mr. George Clare's *A B C of the Foreign Exchanges*, though all three of these differ to a degree with respect to the subject-matter chosen for emphasis and elaboration. While

Money-Changing is a well-executed and entirely praiseworthy effort to give the exchanges a popular and not over-lengthy explanation, it seems to the reviewer its claims to the first attention of the student are not quite so good as those of the books of Clare and Escher. It is, however, assuredly a welcome member to the family of exchange "elements." Mr. Anthony Margraff's *International Exchange* contains much more information on banking forms and procedure than any of the three books mentioned, but is distinctly inferior to any one of them in its exposition of the exchanges as a general system and in its style.

The reviewer does not find matters of consequence in *Money-Changing* which call for extended criticism. A classification of monetary systems is offered which makes the English the only true-blue and copper-riveted gold standard. The next best are "so-called gold standards" under which credit is convertible into gold only part of the time and then when the great banks permit it (p. 13). It is affirmed a number of times with emphasis that London possesses the only real free market for gold (as on pp. 37-9 and 171-4). Stress is also laid on the fact neglected by "theoretical students" that because banks often ship gold without regard to the immediate factors of costs and profits the exchanges may readily go beyond the gold point, when they are favorable to London, without causing shipment of specie to that center; and may occasion export of specie from London before they reach the opposite gold point, when they are unfavorable to London. There is an able and interesting discussion of finance bills and of the influences which impose limits upon their creation.

A. C. WHITAKER.

Stanford University.

Indian Currency and Finance. By JOHN MAYNARD KEYNES.
(London: Macmillan and Company. 1913. Pp. vii, 259.
6s.)

The appearance of this book is of unusual interest and importance, not only because of the author's detailed knowledge of Indian finance, but also because it sets forth the views of one who has recently been offered a seat on the Royal Commission (1913) on Indian Finance and Currency. The author first endeavors to dispel the illusion that the use of gold as a medium of exchange is a necessary complement of a gold standard. Attention is called to the growing tendency of European state banks to hold large portions of their resources abroad in foreign bills and credits, which

can be utilized for the purpose of making foreign payments, whenever a drain upon their gold supply is threatened. The gold-exchange standard is only a perfected form of the system toward which gold standard currencies have been evolving, and as such the Indian system is not an anomaly, but represents an advance stage of monetary progress. The increased circulation of gold in India would be open to objection on three counts. First, it would involve the substitution of relatively dear gold coins for overvalued silver rupees. Second, since rupees must continue to circulate widely, the scattering of the gold resources over the country, instead of their concentration in the reserves, would weaken rather than strengthen the government's power to maintain a parity of the rupee with gold in a period of falling exchange. In the third place, the tendency for gold to supplant currency notes would be increased, causing a decentralization of the reserves and a decrease in the circulation of the only element by which India can hope to secure the necessary degree of elasticity in its currency system. The author next endeavors to disprove the oft-made assertion that the volume of the Indian currency depends upon the amount of council bills which the India Office may choose to offer for sale. "Exceptional amounts of Council Bills are only sold when exchange has reached a point at which it is nearly as profitable to remit gold," while if the tender of bills is small relative to the demand, gold is exported to India.

If the foregoing views command assent, their acceptance must involve the conclusion that a policy should be adopted according to which shipments of gold to India would be discouraged. Such a result could be obtained by the issuance of a notification by the Secretary of State, declaring his willingness to sell council bills in unlimited amounts at a rate within the gold point—say, 1s. 4-1/16d. For the purpose of supporting exchange, as well as for purchasing silver for coinage, gold is as useful in London as in India; hence, the bringing of gold to India and then shipping it back to England involves a sheer economic loss. Notwithstanding Keynes' conclusion that a portion of the Indian supply of gold can be got at by the London market, whether it is "held in London or in India, by perfectly legitimate means," he suggests that, in order to relieve the suspicion which is attached to the holding of the government's gold resources in London, it might be desirable as a compromise measure to hold the gold in the currency reserve in India. Is not this an unnecessary concession

to prejudice? Any system wherein gold does not circulate freely in India is bound to meet with much ill-founded criticism in any case, and the government's intention to afford all legitimate relief to the Indian market can be displayed in some such manner as the author himself suggests in chapter 8. And the government's final answer to its critics must be the efficiency of its system in preventing wide fluctuations in exchange. If a further notification should be issued, according to which sterling drafts on London could at all times be obtained at a rate of 1s. 3-29/32d. per rupee, the limits within which exchange could fluctuate would be defined by a clear-cut governmental guarantee. Would not such a course be efficacious in disproving the widely prevalent belief that the rates of Indian exchange are in large measure regulated by governmental action? Hence, the reviewer believes that the reasons for perfecting the machinery of the exchange standard outweigh decidedly any which may be advanced in favor of sacrificing efficiency and economy to political expediency.

The author looks upon the high rate of bank discount prevailing in India in the busy seasons as due largely to the fact that the volume of the currency can be temporarily increased only by securing funds from abroad. As corrective measures he urges: first, a change in the composition of the investment portion of the paper currency reserve; and, second, the institution of suitable machinery for utilizing the funds in the cash balances and the currency reserve, in order that means may be found for affording relief to the Indian money market in periods of heavy pressure. Little aid, however, could ordinarily be obtained from the cash balances; hence the desirability that they should be held as largely as possible in the form of notes, in order that the capacity of the paper currency reserve may be increased. It is in the more extensive use of paper, rather than of gold, that the Indian currency system may best adapt itself to the particular financial needs of the country.

This conclusion, which is the author's main theme, is established in a convincing manner. The book, unfortunately, was published without the inclusion of several projected chapters, but as it is, it is a valuable contribution to a subject concerning which we may shortly hear of further developments.

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Seventeen Talks on the Banking Question. By CHARLES N. FOWLER. (Elizabeth, N. J.: Financial Reform Publishing Company. 1913. Pp. 514. \$2.50.)

Congressman Fowler makes a valuable and somewhat unique contribution to the current discussion of banking reform. The book is written in the form of a conversation between Uncle Sam and six citizens of various occupations. These hold seventeen weekly meetings. Starting with a discussion of elementary principles of money and banking, they progress to a study of the defects of the American banking system and finally agree upon a plan of reform. Written in popular and even colloquial style, the expression is nevertheless always clear and simple, in spite of occasional repetitions and digressions and lengthy elaborations of truths that might be more concisely stated.

Mr. Fowler is not altogether successful in his definitions of fundamental economic terms. Thus the definition of wealth as "whatever can be exchanged for money," including rights such as checks, bonds, etc. (pp. 104-5) can hardly be commended. We must take exception to such a sentence as this: "Wealth consists of property convertible into money, and therefore implies exchangeability, while property may not mean wealth at all, because the property has no exchangeable value" (p. 107). Other unfortunate concepts will be found in chapter 6 (pp. 101-117).

But all this is a small matter, detracting little from the general excellence of the argument and conclusions. Upon the fundamental principles of money and banking, Mr. Fowler is thoroughly sound and remarkably well-informed. Certain old-fashioned economic truths are driven home with irresistible logic and a wealth of historical evidence: That nothing should properly be called money except gold coin and bullion; that no credit instrument should be regarded as money; that a sound monetary system should consist of three things, gold coin (and gold certificates), subsidiary coin, and bank credit currency; that inexorable current redemption and a reserve of gold furnish the only basis of a sound credit currency; that one debt is not a safe reserve for another debt; and that there is no place in a sound monetary system for government credit currency—these are some of the truths which the author continually forces upon the reader. It is through disregard of these truths that the monetary history of the United States is a long dismal record of blunders and makeshifts with their attendant consequences. It is disregard of these truths that

is at the present moment threatening us with a "reform" of our banking system which perpetuates many of the fundamental fallacies from which we have suffered in the past.

Mr. Fowler's own plan, developed in the last three chapters, is in the reviewer's opinion deserving of the most careful consideration. Its main features are as follows: Authority is granted to national banks to do savings and trust company business, the assumption being that practically all commercial banks will eventually become national banks. Provision is made for refunding the two per cent bonds, abolishing the present bond-secured national bank notes, retiring the greenbacks, and making token money of the silver dollars. Every bank is compelled to carry reserves consisting of gold or gold certificates only. A note issue system is provided, similar to that in Canada. The country is separated into a number of commercial zones, each with a central clearing house. This central organization is to hold deposits, make exchanges, redeem checks and notes, make rediscounts, examine the banks of its territory, etc., performing thus the functions of a clearing house and central bank for its territory. Its organization is to be quite independent of the other zones, but brought into a national system through its relation with a national "American Reserve Bank." The reserves of the whole country will be held partly by the individual banks, but largely mobilized in the zone centers and the central reserve bank. A simple scheme of electing the officers of the various clearing houses and of the central bank would seem to put the management where it belongs and keep politics entirely outside. The United States government is relieved of the business of issuing credit currency or of keeping up its independent treasury.

Mr. Fowler's plan is based upon sound principles. In the reviewer's opinion, it is immeasurably superior to the Aldrich plan, which the author criticizes very severely, as well as to the monetary bill at present before Congress. Mr. Fowler has long stood as the champion of scientific banking reform. Few members of Congress in recent years have so fully grasped the economic principles on which alone a sound currency system can be established.

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Le Banche e il Mercato Monetario. By MARCO FANNO. (Rome: Athenaeum. 1913. Pp. 395. 8 l.)

This volume is a stimulating contribution to economic literature.

It covers in an excellent manner the relation between the development of banking and the development of the money market, a field which, strangely enough, is but lightly touched upon by American and English writers. The footnote quotations from French, German, English, and American writers, as well as Italian, show a wide grasp of the subject from the standpoint of history and of theory, and would alone make the volume valuable.

Fanno traces the development of banking during the last three centuries through three stages of economic growth: (1) the agricultural period, to which belongs the development of the *banche di emissione*, or the banks of issue, adapted as they are to assisting in the monetary needs of agricultural communities; (2) the period of transition, in which originated the institutions of *credito mobiliare*, or commercial banks, and *banche di deposito*, or banks of deposit; (3) the industrial period, which saw the centralization of banking in all countries, coördinate with the general centralization of economic structure, and with the domestic and foreign expansion of individual institutions. Along with this analysis is a study of the coördination of these different kinds of banking institutions, the laws of their development, and the part they have played in gradually working out a division of labor and function, and all together forming a complete organism.

In the last chapter of part I, Fanno shows the close connection between the stock exchange and the various elements in the funds of banks. Between the stock market and the money market exists a connection intimate and reciprocal, a movement in the one reflecting itself in the movement of the other. Part II elaborates the activities and laws of the money market, based as they are upon the banking practices of the most advanced countries and having their movements balanced upon the daily movements of the short-time loan market. These laws of the money market are examined by separating them from the technical aspects of market phenomena and by reducing them to mathematical formulae, a method difficult for the non-mathematical student to follow.

Excellent chapters on the demand for and the supply of loanable funds lay the foundation for a discussion of the organic laws of the money market in three hypothetical cases: that of a single merchant, that of communicating countries having equal rates of discount, and that of communicating countries having diverse rates of discount.

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Public Finance, Taxation, and Tariff

Essays in Taxation. By EDWIN R. A. SELIGMAN. Eighth edition, completely revised and enlarged. (New York: The Macmillan Company. 1913. Pp. xi, 707. \$4.00.)

Seligman's *Essays in Taxation* has for long occupied so important a place among American works on the subject that it is a pleasure to welcome a new edition. First published in 1895, certain parts had gradually lost their usefulness in the face of the rapid progress which the past eighteen years have seen in the theory and practice of taxation. The book is now thoroughly revised and brought down to date and again deserves its place as probably the most valuable single American book on taxation. Professor Seligman excels, as always, in his careful analysis of laws and movements and in his exhaustive summaries of the world's

literature of taxation. On the other hand, one could wish that more original study had been given to the economic effects of taxation. On such questions Professor Seligman is inclined to content himself with summarizing the conclusions of other writers and official reports. This is especially noticeable in the account of the tax experiments of Australasia. Questions propounded in the earlier edition are still left unanswered, although sufficient time would seem to have elapsed to make a careful study fruitful of results (see pp. 465, 527-531).

Assuming that the reader is familiar with the earlier editions, the reviewer will attempt particularly to note the changes and additions now made.

Of the thirteen chapters of the old edition eleven are carried over to the new book with little change. Thus in the first five chapters the only important changes are the following: The historical account of the general property tax in the medieval period has been largely rewritten and some new matter added (pp. 39-56); slight additions are made in chapter 3 recording the recent development of the single tax movement in the United States; and in chapter 5 the account of the development of the inheritance tax in the United States is brought down to date (pp. 137-140). Chapter 8, on complications and conclusions of the corporation tax, and chapters 14 to 16, dealing respectively with the classification of public revenues, the betterment tax, and recent reforms in taxation, 1893-1895, are all practically identical with the corresponding chapters in the previous edition. The addition of a section on the literature of the United States to the chapter on recent literature in taxation and abstracts of four new tax reports added to the chapter on American reports on taxation, 1870-1900, are the only important changes in these chapters.

The most important changes made in the new edition are the complete revising of the first two chapters on the corporation tax; a new chapter giving a survey of the tax reforms adopted in 1909 and 1910 by the leading nations of the world; the addition of two chapters on recent American tax reports; and the introduction of five new essays on topics not covered in the old book.

Chapter 6, on the history of corporation taxation, has been largely rewritten. The account is brought down to date, much new matter is added, and the treatment is greatly improved. A valuable bibliographical note is added (pp. 142-145). Chapter 7, dealing with principles, is chiefly notable for the new discussion

of the relative merits of the tax on property and the tax on earnings, and, in case of the latter, of the question whether the basis should be net or gross earnings. Attention is given to the recent substitution of ad valorem for earnings taxes in Michigan and Wisconsin. Professor Seligman fails to find here any reason for changing his belief in the superiority of the earnings tax, and the argument in support of this conclusion appears to be unassailable. On the other hand, Professor Seligman's continued preference for the *net* earnings tax appears less defensible. His discussion of this question (pp. 242-3, 245-9, 258-60) is quite brief, and does not appear to have fully acknowledged the practical defects of the net earnings tax or the answers which have been made to certain objections to the gross earnings tax. Little recognition is given to the arguments of the Ontario and California commissions in favor of the gross earnings tax. In particular, the inference (p. 259) that the necessary use of net earnings as a means of ascertaining the rates of the gross earnings tax is an argument against the gross earnings tax itself seems almost to imply ignorance of the argument developed by the California commission. This chapter contains also an excellent account of the Supreme Court decisions by which the constitutionality of the earnings tax (properly drawn) has now been thoroughly established.

Chapter 17 treats of the reforms of 1909-1910, with enough of the intervening history to make the account intelligible. Professor Seligman fails to find in the great development of land taxation, and even in the new taxes on unearned increment, any comfort for the single taxers.

The last four chapters deal with the recent literature of taxation. The three chapters on American tax reports are remarkably complete and maintain the enviable standard which Professor Seligman's work along this line has always set. On the other hand, chapter 18, covering the non-official literature since 1885, is disappointingly meager. Little has been added to the analysis of European literature contained in the old book. Only the period up to 1900 is covered, the European literature of the present century being dismissed with a brief footnote on page 595, mentioning eight authors. The new section on the United States literature consists of reviews of Adams' *Science of Finance* and D. A. Wells' *Theory and Practice of Taxation*.

Chapters 9 to 13 are new to this book, although all have been

previously published elsewhere. Chapter 9, on modern problems in taxation, is a brief general discussion, which appeared first in the *Proceedings of the Congress of Arts and Sciences, Universal Exposition (St. Louis, 1904)*, vol. VII. Chapter 10, *A Quarter Century's Progress in Taxation*, is Professor Seligman's presidential address at the meeting of the American Economic Association in 1908 and needs no comment in this REVIEW. The next three chapters are essays previously published in the *Proceedings of the National Tax Association*. Chapter 11 is a strong appeal for separation of state and local revenues. It contains an argument in favor of the plan of apportioning state expenses among local bodies in proportion to the expenditures of the latter, rather than according to the assessed value of property, as is the present rule. Chapter 12, on the relations of state and federal finance, is chiefly noteworthy for the author's proposal that revenue be raised in the United States by federal taxes on incomes, inheritances, and corporations, the proceeds to be distributed in whole or in part among the states. Chapter 13 is a telling argument in favor of precision in assessments.

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- *Tax law of the state of New York; being l. 1909, chap. 62, entitled "An act in relation to taxation, constituting chapter sixty of the consolidated laws," with all amendments made at the legislative session of 1913.* (New York: Baker, Voorhis & Co. 1913. Pp. 245. \$1.)
- *Classification normale des impôts d'état en France.* (Paris: Le Comité Central d'Etudes et de Défense Fiscale, 21 Rue Croix-des-Petits-Champs. 1913.)
- *La situation financière des communes de France et d'Algérie en 1912.* (Melun: Imprimerie Administrative. 1913. Pp. xxiii, 740.)
- *Die neuen Reichssteuergesetze. I. Der einmalige Wehrbeitrag. II. Die Besitzsteuer. III. Das Gesetz über die Aenderungen im Finanzwesen.* (Bremen: C. Schünemann. 1913. Pp. 41. 0.50 m.)
- *Die steuerliche Ueberlastung des deutschen Haus- und Grundbesitzes. Stenographischer Bericht der Protestversammlung vom 12. Jan. 1913, veranstaltet von der Ortsgruppe Köln (Rhein).* Schriften des Verbandes zum Schutze des deutschen Grundbesitzes und Realkredits, 7. (Berlin: Selbstverlag des Verbandes. 1913. Pp. 47.)
- *Veröffentlichungen des kaiserlichen Aussichtsamts für Privatversicherung. Gesamtregister für die Jahrgänge 1902-1911.* (Berlin: Guttentag. 1913. Pp. 62, 32. 4 m.)

Population and Migration

Immigration. A World Movement and Its American Significance.

By HENRY PRATT FAIRCHILD. (New York: The Macmillan Company. 1913. Pp. ix, 455. \$1.75.)

Professor Fairchild's *Greek Immigration*, which appeared in 1911, was a guaranty that any book by him on general immigration would be a thorough and valuable piece of work; and the present volume seems to the writer much the best treatment of the subject that has appeared in recent years. In any work of moderate size, dealing with so large a topic, certain limitations are inevitable. The material has increased so much in the last few years that writers are obliged to choose between a detailed statistical treatment with a minimum of discussion, and a narrative and critical statement with fewer tables of figures. Jenks and Lauck, in *The Immigration Problem*, chose the former method; while Fairchild follows the latter, often referring to other writers for statistical details. And yet he has summarized accurately the results of recent investigations, and added wise and cautious interpretations, in such a way that little of value to the general reader has been omitted.

The author points out in his preface (see also p. 166), that immigration may be considered from several points of view—that of the native American, that of the immigrant, and that of the world as a whole.

The immigration question is set forth as a part of an inclusive conservation program for all humanity. The modern situation is placed in its appropriate historical setting. Particularly, it is demonstrated that the popular notion that a belief in restriction is inconsistent with sympathy for the immigrant is false. The restrictionist may be the truest friend of the alien.

Fairchild devotes considerable space to colonial and early immigration, nearly one quarter of the book dealing with the period before 1882. This survey is one of the most interesting parts of the volume, because it contains much material not found in other recent works, and because it shows how early certain evils of immigration were recognized. Then follow a brief summary of federal legislation, and chapters on the volume and racial composition, the causes, and the effects of immigration. Next are discussed the methods of inspection, the condition of arriving aliens, their distribution, and their effect upon the standard of living. Then are considered the exploitation of immigrants, wages, pau-

perism, crime, insanity, industrial effects, social stratification, political effects, and the results of emigration in foreign countries. There is also an ample bibliography.

The great merits of the book are its comprehensiveness and its sane and well-balanced discussion of disputed points, especially in the interpretation of statistics. The author points out (p. 127) that the usual method of computing the net addition to population by comparing the numbers of immigrant and of emigrant aliens is defective in neglecting to take into account the permanent domicile of many non-immigrant and non-emigrant aliens. He disposes (p. 228) of the oft-repeated argument from the low density of population in the United States; and (p. 308) of the fallacy that immigrants force native workers into better positions.

Especially convincing is his discussion (pp. 215-226) of General Walker's theory that immigration has not increased population in this country. Although, unfortunately, Dr. Hourwich's *Immigration and Labor* had not appeared when this work was being written, the latter's arguments on Walker's thesis and on many other points are completely refuted. It is currently supposed that the ebb and flow of immigration constitute a safety valve in our industrial situation; but Fairchild, following Commons, shows (pp. 351-358) that there is good ground for thinking that immigration helps to cause crises and panics by preventing that rise in wages which would check overexpansion.

The author does not take up in detail recent suggested legislation or expressions of opinion on restriction, perhaps for lack of space. He condemns without qualification race prejudice, which, however, probably has distinct value as a conservative force. In a footnote, he complains that the word "recreation" does not appear in the indexes of recent works; but it may be noted that the word "eugenics" does not occur in his own. Apart from economic considerations, the present tendency is to regard regulation of immigration as a branch of national eugenics; the subject is covered, however, indirectly. The book may be cordially commended to all interested in immigration problems.

PRESCOTT F. HALL.

Gli Stati Uniti d'America e l'Emigrazione Italiana. By LUIGI VILLARI. (Milan: Fratelli Treves. 1912. Pp. 314. 3.50 l.)

The first two thirds of Signor Villari's book, describing American institutions and life for the sake of Italians in Italy, have

little of interest for Americans. Not so, however, the final third, since it gives the judgment of an observant Italian upon the Italian population of America. Compared with the considerable mass of American writings touching this population, there is only a meager offering by the Italians themselves, resident or visiting—such men as Preziosi, Mayor des Planches, Stella, Franzoni, for example. Villari's qualifications are that he has been a traveling inspector for the Italian emigration service, and a consul who has been stationed in important consular districts.

He studies the Italians in their colonies, in agriculture, and "afloat." He discusses their intellectual, religious, and political life, and the problems of their protection by the home authorities. He emphatically does not share the optimistic view of those who single out the first achievements of a foreign people in America, and hold them to be full of promise. Most emigrants he deems are not fitted for their task of settlement, and should not have left their country. Illiteracy and general lack of schooling destine them to failure. Those who have become rich were well-to-do before coming. In manufacturing, the Italians count for nothing; in importation of Italian products (largely for Italian consumption) some have done well; a few have succeeded in agriculture. But for most, the living and sanitary conditions are very bad compared even with those left behind; and in the cities the compensations that accompanied rural poverty in Italy are absent. In the colonies, cheapness and pettiness and fraud are omnipresent. The absurd "prominenti" as the leading citizens are called; the tenth-rate bankers who fatten on their prey of the ignorant and gullible; the treacherous newspapers with their personal rivalries, blackmail and cheating advertisements; the puerile mutual aid societies which today flourish, and tomorrow have left not even a trace; the parades ("parate") and banquets; the general absence of culture, independence, enterprise: these things are the sorry characteristics of a population of many hundreds of thousands.

Villari is disappointed. The issue between him and the optimists is scarcely one of fact, though it may be partly one of scope. Rather it concerns how much may legitimately be expected of so abundant a population. Villari predicts only good for his country, as for America, from the restrictive measure—literacy test or what not—which sooner or later he believes will be enacted by the American Congress. With his eminent father he shares the opinion that the emigrants who return to Italy, though richer in dollars, are poorer in health and in character. Students who reach

different conclusions upon a subject so little measurable statistically, and so little measured, will deem Villari prejudiced. It is his merit at least that he applies standards to the facts he observes.

ROBERT F. FOERSTER.

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La Question de la Population. By PAUL LEROY-BEAULIEU.
(Paris: Librairie Félix Alcan. 1913. Pp. iv, 512. 3.50 fr.)

Although disavowing the intention to write a tract for the times, M. Leroy-Beaulieu has made, in the present comprehensive study of the population problem, an appeal and a warning not only to France but to the whole white race. The first two books contain a history and critical analysis of population doctrines centering chiefly about the Malthusian theory. Malthus' contention as to the rate of increase is proved, with perhaps unnecessary fullness, to have been unfounded, the evidence being taken from statistics of European peoples, the United States, Argentina, and the French Canadians. Book III treats of the influence of modern civilization on the movement of population, book IV of the Neo-Malthusian movement, book V of the special situation in France, and book VI of emigration.

Not only was Malthus wrong, but "the danger to civilization is exactly the opposite of what Malthus believed it to be." The world can support at least double its present population, and unless the white race continues to produce a surplus for one or two centuries more it will be overwhelmed by black and yellow peoples in the struggle for mastery in Asia, Africa, and the Pacific. This note of alarm is almost identical with that recently sounded by Weale in his *Conflict of Color*. Malthus, thinks M. Leroy-Beaulieu, failed to foresee how profoundly modern psychic and cultural change would affect population. Two classes of causes account for this change. (1) Economic: under modern conditions, with child-labor legislation and the increased cost of rearing, children "do not pay" as they once did, and are an economic burden. (2) Personal-moral: education, family ambition, and excessive prudence make smaller families desirable, but even more potent influences are the spirit of ease and self-indulgence (summed up in M. Leroy-Beaulieu's graphic terms "*arrivisme*" and "*l'esprit arriviste*"), the decline of morality ("*neo-paganisme*"), and the feminist movement. "The masculinization of women is, from

every point of view, one of the great perils of contemporary civilization."

A favorite thesis of the author is that nations, like individuals, grow old, and that the present situation as to population, especially in France, is a mark of racial senility. He raises the serious question whether other nations are not destined to follow France toward stationariness or decline. For France there is the stern alternative of a speedy reform or depopulation and denationalization. Two centuries more of the present tendency would absolutely eliminate the French people. The remedy is clear and definite. It is to make the three-child family the normal one. Everything must be directed to this end. Not only must inheritance laws be changed, but public encouragement must be given to families having three or more children (*i.e.*, normal families) in the form of direct aid, preference in the public service and in housing, and plural votes for the fathers of such families.

In so far as the condition is due to economic causes these remedies might prove effective, but on the author's own showing the declining birth-rate is chiefly due to those secular psychic changes which temporary and external expedients would hardly reach. Of course the situation in France is exceptional, but it is critical largely because of military needs. Among most of the other civilized nations a lessening birth-rate is undoubtedly an economic and cultural gain. A good case may be made for the contention that most of the evils of population, at least outside of France, are not due to too low a rate of increase but to bad distribution of the population.

ULYSSES G. WEATHERLY.

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I Fattori Demografici dell' Evoluzione delle Nazioni. By CORRADO GINI. (Torino: Fratelli Bocca. 1912. Pp. 139.)

The Contributions of Demography to Eugenics. By CORRADO GINI. Translated from the Italian. (London: Charles Knight and Company. 1913. Pp. 99.)

The first of these two essays, given originally in the form of a lecture, and somewhat popular in treatment, undertakes to explain the growth and decay of nations by variations in the birth-rates of different elements in their populations. The causes, in turn, of these variations in birth-rates the author finds in the degree of economic development reached in any given instance. This is not

the simple correlation between advancing prosperity and a declining birth-rate, so generally familiar, but a somewhat more extended cycle of cause and effect. The author's generalizations are supported by much interesting historical and statistical material relating to the principal civilized countries.

Of special interest to American readers is the discussion of migration as a factor in evolution. The material collected here seems to throw doubt upon the generally accepted theory that the progressive decline in our native birth-rate is due to fear of competition with the immigrant. For the examples adduced seem to show that hope of advancement rather than fear of degradation is the prime motive for restriction of population, which would suggest that our native birth-rate declined, not because immigration threatened the prosperity of the native-born, but because it was actually pushing them up, as a class, to higher economic levels.

The second essay is a detailed and ingenious statistical inquiry into the reasons for the high infant mortality of the human species. The data given are obtained mainly from the official vital statistics of different countries, but partly from investigations specially made by the writer in the offices of municipal statistics at Rome and Cagliari, and the lying-in hospitals of several Italian towns. This enquiry correlates the number and characteristics of offspring with season of conception, season of birth, interval between births, age of mother, of father, age of parents at marriage, difference in age of parents, their duration of life, and certain special characteristics.

Some of the more important conclusions are that while for some countries a greater frequency of births and greater viability of offspring from spring conceptions seems to indicate an advantage in confining reproduction to a supposed original or "natural" period, wider statistical enquiry does not sustain this as a general proposition: that the human characteristic of reproduction at all seasons of the year may, however, have an indirectly deleterious influence upon offspring by favoring deliveries at too frequent intervals: that the younger the parents at marriage the greater the vitality and the better the physical and intellectual characters of the offspring: that permitting the reproduction of the weak and degenerate lowers the vital resistance of the race: and, finally, that the most practical present means of improving the quality and increasing the quantity of offspring is lowering woman's age at marriage. For this, says Professor Gini, would not meet with the

opposition of self-interest, sentiment, or animal instinct, as would other remedies proposed, such as the introduction of natural feeding, increase of interval between deliveries, prevention of the reproduction of the unfit, or even lowering the age of men at marriage, but is "concordant with the girls' desires, and the aesthetic sentiments of the men."

KATE HOLLADAY CLAGHORN.

New York School of Philanthropy.

NEW BOOKS

- BARNES, M. E. and L. C. *The new America, a study in immigration.* (New York: Revell. 1913. Pp. 160. 50c.)
- CHESTERTON, G. K. *The evils of eugenics.* (London: Cassell. 1913. 6s.)
- COLLETTI, F. *Dell' emigrazione italiana. Cinquanta anni di storia italiana (1860-1910).* (Milan: U. Hoepli. 1912. Pp. xii, 278. 10 l.)
- DAVENPORT, C. B. *State laws limiting marriage selection.* (Cold Spring Harbor, L. I.: Eugenics Record Office. 1913. Pp. 9. 40c.)
- ELDERTON, E. M. and others. *On the correlation of fertility with social value.* Eugenic laboratory memoirs, XVIII. (London: Dulau. 1913. 6d.)
- FINZIO, G. *Mortalità infantile in rapporto alle condizioni dei genitori.* (Rome: Tip. Ed. Nazionale. 1913. Pp. 22.)
- GARGAS, S. *Zur Regelung des Auswanderungswesens in Oesterreich.* (Vienna: Moritz Perles. 1913. Pp. 52. 1.20 m.)
- GRUNFELD, E. *Die japanische Auswanderung.* (Berlin: Behrend & Co. Pp. 157.)
- HERSCH, L. *Le Juif errant d'aujourd'hui. Etude sur l'émigration des Israélites de l'Europe orientale aux Etats-Unis de l'Amérique du Nord.* (Paris: Giard & Brière. 1913. 6 fr.)
- JOSEPHY, F. *Die deutsche überseeische Auswanderung seit 1871 unter besonderer Berücksichtigung der Auswanderung nach den Vereinigten Staaten.* (Berlin-Wilmersdorf: Welt-Verlag. 1913. 3 m.)
- KAMPPMEYER, P. *Vom Kathedersozialismus zum Kathederkapitalismus. Eine Antwort auf Prof. B. Bernhardt's: "Unerwünschte Folgen der deutschen Sozialpolitik."* (Ludwigshafen am Rhein: Gerisch & Co. 1913. Pp. 48.)
- KNIBBS, G. H. *Commonwealth demography, 1912, and previous years.* Population and vital statistics, bulletin No. 30. (Melbourne: Commonwealth Bureau of Census and Statistics. 1913. Pp. 247.)
- KURTEN, O. *Statistik des Selbstmordes im Königreich Sachsen.* Ergänzungshefte zum deutschen statistischen Zentralblatt, 3. (Leipzig: Teubner. 1913. Pp. 145. 4s.)

- MARKTIAN, F. *Die österreichische Saisonwanderung.* (Vienna: Opitz. 1913. Pp. 30. 1 m.)
- MAYOR DES PLANCHES, E. *Attraverso gli Stati Uniti, per l'emigrazione italiana.* (Torino: Unione tip. ed. 1913. Pp. viii, 321. 6 l.)
- MICHEL, E. *La dépopulation en Normandie.* (Paris: Berger-Levrault. 1913. Pp. 60. 3 fr.)
- MITSCHERLICH, W. *Die Ausbreitung der Polen in Preussen.* (Leipzig: Hirschfeld. 1913. Pp. xv, 295. 8 m.)
- RASINI, C. *Di alcuni problemi sulla emigrazione ed immigrazione italiana: tesi di laurea.* (Torino: A. Vireto. 1912. Pp. 59.)
- ROLOFF, G. *Geschichte der europäischen Kolonisation seit der Entdeckung Amerikas.* (Heilbronn: Eugen Salzer. 1913. Pp. 248. 3 m.)
- ROSSIGNOL, G. *Un pays de célibataires et de fils uniques.* (Paris: Delagrave. Pp. xvi, 327. 4.20 Kr.)
- SEEBERG, R. *Der Geburtenrückgang in Deutschland.* (Leipzig: Deichert. 1913. Pp. viii, 76. 1.80 m.)
- SHRIVER, W. P. *Immigrant forces; factors in the new democracy.* (New York: Missionary Education Movement of the United States and Canada. 1913. Pp. ix, 277. 50c.)
- THEILHABER, A. *Das sterile Berlin.* (Berlin: E. Marquardt. 1913. Pp. 165. 4 m.)
- WILLIAMS, D. J. *The Welsh of Columbus, Ohio; a study in adaptation and assimilation.* (Oshkosh, Wis.: D. J. Williams. 1913. Pp. 144, illus. \$1.40.)
- ZIEMANN, H. *Ueber das Bevölkerungs- und Rassenproblem in den Kolonien.* (Berlin: Süsserott. 1913. Pp. 28. 0.40 m.)
- *Ages and condition as to marriage.* Census, 1911, England and Wales. Vol. VII. Cd. 6610. (London: Wyman. 1913. 4s. 11d.)
- *Mortality statistics, 1911. General death rates, specific and standardized death rates, infant and child mortality, causes of death.* Bulletin 112. (Washington: Department of Commerce. Bureau of the Census. 1913. Pp. 142.)

Social Problems and Reforms

NEW BOOKS

- BAWDEN, W. T., editor. *Proceedings of the sixth annual meeting of the National Society for the Promotion of Industrial Education, Philadelphia, December 5-7, 1912.* (Peoria, Ill.: Manual Arts Press. 1913. Pp. 309.)
- CHASE, J. F., BOOS, W. F., and KEBLER, L. F. *The dope evil.* I. *From a reformer's point of view.* II. *From a physician's point of view.* III. *From a statistician's point of view.* (Boston: N. E. Watch & Ward Soc. 1913. Pp. 38. Gratis.)

CLEVELAND, F. A. *Organized democracy*. American citizen series. (New York: Longmans. 1913. Pp. xxxvi, 479. \$2.50.)

COLLIN, R. *Les foyers nouveaux*. (Paris: Bloud et Cie. 1913. Pp. 170. 1.25 fr.)

The value of the coöperative method of home building and ownership seems to have become generally recognized in France, especially in the smaller communities where individual homes are still possible. It is unfortunate that only the economic aspect of the improved conditions resulting from this effort are emphasized in this book but the movement is still too new in France to lend itself to statistical study which would show a rise in the moral and sanitary conditions of the communities materially effected by coöperative building. Such material could, however, be found in abundance in England and Germany where careful studies have been made.

Dr. Collin deals with the organization of the various classes of coöperative building societies and gives in detail their histories so as to show their growing popularity and the changes in methods of administration and financing that have recently taken place. The part that state and municipal governments play in promoting the interest in the building society and individual ownership is especially illuminating. Tax exemption, legislation compelling investments on the part of savings banks, insurance companies, etc., and coöperative building schemes should be of especial interest to workers in America where restrictive and prohibitory legislative control has been exclusively resorted to, while the promotive work has been intrusted entirely to the speculative builder and real estate dealer who have commercialized every possibility for housing provisions.

The book is permeated with the French spirit of patriotism that throbs with a sense of social responsibility, indicating that French statesmanship has been applied to a national problem which in this country is generally being relegated to municipal and town governments.

CAROL ARONOVICI.

FELIX, M. *Les retraites ouvrières et paysannes*. (Paris: A. Rousseau. 1913. 20 fr.)

HENDERSON, C. R. *Social progress in the West*. (Chicago: University of Chicago Press. 1913. Pp. 28, 184. \$1.25.)

HOWERTON, J. R. *The church and social reforms*. (New York: Revell. 1913. Pp. 127. 75c.)

HYDE, W. D. *The quest of the best*. (New York: Crowell. 1913. Pp. vi, 265. \$1.)

ICHENHAUSER, E. *Frauenziele. Aufgaben der Frauenbewegung*. (Berlin: A. Schall. 1913. Pp. 345. 3 m.)

KERSCHENSTEINER, G. M. A. *The idea of the industrial school*. Translated from the German by RUDOLF PINTER. (New York: Macmillan. 1913. Pp. 11, 110. 50c.)

LEAKE, A. H. *Industrial education, its problems, methods and dangers*. (Boston: Houghton Mifflin. 1913. Pp. xi, 205. \$1.25.)

LEHR, A. *Wohnungsgeschichte und Wohnungsbau*. Schriften des bayerischen Landesvereins zur Förderung des Wohnungswesens, 9. (Munich: Reinhardt. 1913. Pp. vii, 59. 1 m.)

LEVY, H. *Economic liberalism*. (London: King. 1913. 4s. 6d.)

MCCANN, A. W. *Vital questions and answers concerning 15,000,000 physically defective children*. (Cleveland: F. M. Barton. 1913. Pp. 57. 50c.)

MCCARTHY, C. *The Wisconsin idea*. (New York: Macmillan. 1912. Pp. xvi, 323. \$1.50.)

For the last ten years Wisconsin has led our American commonwealths in legislative experimentation, especially in the field of socio-economic legislation. As a result, students of such legislation, reformers, and even politicians have been turning with interest to Wisconsin to learn how the thing has been done, and what have been the actual results of the new laws, so far as those results can now be judged. Mr. McCarthy, as chief of the Legislative Reference Library of the Free Library Commission, and who has had a great deal to do with the framing and enactment of the new laws, is constantly receiving inquiries regarding them, and he has written *The Wisconsin Idea* primarily to answer such inquiries.

The book will be a handbook for the legislator, and for every student of American legislation who is interested in the method as well as the substance of law making.

GEORGE RAY WICKER.

MCCRACKEN, T. C., editor. *Handbook of opportunities for vocational training in Boston (regular college courses excepted)*. (Boston: Women's Municipal League. 1913. Pp. ix, 301. \$1.25.)

MOTLEY, J. M. *Housing rehabilitation*. A reprint of part IV of the San Francisco Relief Survey. (New York: Survey Associates, Inc. 1913. Pp. 63.)

The investigation deals with the policy and methods followed in furnishing temporary shelter and permanent homes after the San Francisco earthquake. The social status of each family, its earnings, size of accommodation, and rent paid before the earthquake and two years later are examined. Suggestions for future housing rehabilitation on the basis of San Francisco experience are offered.

J. F.

NORRIS, G. W. *The housing problem in Philadelphia*. Catholic summer school extension lectures. (Philadelphia: J. J. McVey. 1913. Pp. 30. 10c.)

PATON, J. S. *Progress and plenty; advocates the single tax, a scientific currency and a minimum wage to abolish poverty and unemployment*. (Boston: Christopher Press. 1913. Pp. 136. \$1.25.)

REVILLE, M. *L'enseignement technique et l'apprentissage*. (Paris: Dunod & Pinat. 1913.)

RUSSELL, G. W. *Coöperation and nationality; a guide for rural reformers from this to the next generation*. (Baltimore: Norman, Remington & Co. 1913. Pp. 103. 50c.)

SEEBERG, R. *Der Geburtenrückgang in Deutschland.* (Leipzig: Deichert. 1913. 1.80 m.)

STRACHEY, J. S. *The citizen and the state: industrial and social life and the empire.* Second edition, revised. (London: Macmillan. 1913. 8d.)

WEBER, A. *Die Steuerpläne der Bodenreformer, ein Hemmnis der Wohnungsreform.* (Berlin: Verband zum Schutze des deutschen Grundbesitzes und Realkredits. 1913. Pp. 15. 0.20 m.)

WEGENER, H. *Geschlechtsleben und Gesellschaft. Das sexuelle Problem und der soziale Fortschritt.* (Hagen i.W.: Otto Rippel. 1913. Pp. 209. 1 m.)

— *Opium question in China. Reports from H. M. Minister at Peking.* 6876. (London: Wyman. 1913. 3d.)

— *Reports of proceedings at a conference on the best method of training women clerks and secretaries.* (London: King. 1913. 6d.)

— *Second annual report of the Philadelphia Housing Commission.* (Philadelphia. 1913. Pp. 31.)

In addition to the customary review of the year's accomplishment in the betterment of local housing conditions, Dr. B. J. Newman submits a study of the effect of forced improvements upon rents. "The data cover 1,065 houses where the cost of improvement approximates \$100 per house. Only 76, or 7.1 per cent, had an increased rental following improvements. In some cases the increase was complicated by the addition of other [voluntary] improvements of a more costly nature. In 16 instances the rents had been reduced. The truth is that two factors constantly act upon the increase in rentals. One is the law of supply and demand determining the case of renting a similar property if the rent of the one in which the tenant is living is raised beyond his means; the other is, that there is a maximum rental for every house beyond which the house will not rent, and unless the neighborhood conditions change this maximum is inflexible, irrespective of such improvements as above mentioned being installed."

J. F.

— *Tenements in administrative counties and urban and rural districts.* Census, 1911, England and Wales, Vol. VIII. 6910. (London: Wyman. 1913. 5s. 6d.)

— *Trades for factory workers. Trades for industrial art workers.* (New York: Alliance Employment Bureau. 25c., 15c.)

Insurance and Pensions

Folk-pensioneringen. By LINDSTEDT and MARCUS. (Stockholm: P. A. Norstedt & Soners Forlag. 1913.)

This treatise on the Swedish old-age and invalidity act, recently approved by the king and to be put into operation January 1, 1914, has especial interest because compiled under the direction

of the chairman of the commission whose four-volume report, the result of five years study of the problem as represented in Sweden and as dealt with in foreign lands, was submitted to the Storting last November. In 88 pages, Professor Lindstedt summarizes the conclusions of the full report, gives a history of the discussion that led up to the practically unanimous adoption of the law and the modifications in its course through the legislative body, and interprets the several sections of the law. The historical introduction has especial interest for the general reader.

The agitation for some adequate provision for the declining years of laborers whose industry had not enabled them to provide for themselves and who might therefore be forced to come upon the poor rates, began in Sweden as early as 1828, when a proposition that employers be required to make annual contributions to an insurance fund in the interest of their workmen and workwomen was presented to the Storting. The bill failed, but similar propositions were made in 1840, 1851, 1856, and 1863. In 1884, the first committee on workingmen's insurance was appointed, and in its deliberations and conclusions regarding workmen's compensation for accidents, sickness insurance, and old-age pensions, all subsequent legislation originates. Under the last head, the committee recommended that insurance against old age and invalidity be made obligatory on all classes, the well-to-do being required to pay an annual premium of 13 krone for ten consecutive years, while the premiums of those unable to meet the requirement should be met for a maximum of five years from the communal treasuries. The state was to meet the cost of administration and to pay the pensions of such citizens as had passed the age of contribution. A second committee on social insurance, appointed in 1891, reported in 1893 in favor of the obligatory insurance of wage-earners whose annual revenue was less than 1,800 krone, but their contributions were to be graded according to income, and the pensions as well. Employers and the state were also to contribute to this insurance fund, the former in the ratio of one fifth and the latter two fifths of the total premiums. To this proposal, the employers raised such a storm of opposition that the bill submitted in 1898 abandoned the employers' contribution and substituted a heavier burden upon the national treasury. The bill of 1905 returned to the policy of a universal contribution imposed upon every registered citizen between the ages of eighteen and sixty years, and this is the principle on which the report of the recent commission is based. The law of 1913 renders insurance against old age and

invalidity obligatory on all classes. Men and women alike contribute to the insurance fund a premium of from 3 to 13 krone per year. Pensions are also graded by income, men receiving 30 per cent and women 24 per cent of the amount he or she has actually paid in, as an annual pension, but an additional pension is awarded to all whose incomes from other sources fall below 300 krone.

Professor Linstedt's interpretation of this interesting piece of social legislation will be translated into English, French, and German in due course.

KATHARINE COMAN.

Copenhagen, Denmark.

NEW BOOKS

ANDERSON, L. A. *Valuation and readjustment of assessment life companies and fraternal societies.* (Madison, Wis.: University Co-operative Co. 1913. Pp. 91. \$5.)

DEITCH, G. A. *Insurable interest.* (New York: Spectator Co. 1913. Pp. 19. 20c.)

DU PASQUIER, L. G. *Mathematische Theorie der Invaliditätsversicherung.* (Bern: Stämpfli & Co. 1913. Pp. 153. 3.50 m.)

FULLER, H. B. *The law of accident and employers' liability insurance.* (Kansas City, Mo.: Vernon Law Bk. Co. 1913. Pp. xii. 568. \$5.)

GEFHART, W. F. *Insurance and the state.* (New York: Macmillan. 1913. Pp. xiii, 228. \$1.25.)

To be reviewed.

IRANYI, B. *Die deutschen Lebens- und Unfall-Versicherungs-Gesellschaften. Uebersichtliche Darstellung der Geschäftsergebnisse in den Jahren 1908-1912.* 22. Jahrgang. (Vienna: J. Eisenstein & Co. 1913. Pp. 40. 1.25 m.)

KUHN, R. *Das Brandversicherungswesen im Königreich Sachsen. Abhandlungen aus dem volkswirtschaftlichen Seminar der Technischen Hochschule zu Dresden,* 5. (Leipzig: Duncker & Humblot. 1913. Pp. viii, 203. 5 m.)

MINUTILLI, G. *Nozioni di scienza attuariale. Matematica delle assicurazione.* (Milan: Hoepli. 1913. Pp. xiii, 329, 87 tables. 4 l.)

MOLT, W. *Der Kreditversicherungsvertrag, zugleich einen Beitrag zu den allgemeinen Lehren des Versicherungsrechts.* (Stuttgart: Kohlhammer. 1913. Pp. viii, 154. 3.50 m.)

RUBINOW, I. M. *Social insurance.* (New York: Holt. 1913.)

To be reviewed.

— *First report of the proceedings of the Board of Trade under part II of the national insurance act, 1911, with appendices.* 6965. (London: King. 1913. 9d.)

——— *Old age pensioners and aged pauperism. Comparative statement, 1906 to 1913.* 7015. (London: King. 1913. 5d.)

——— *Wehrbeitragsgesetz und Besitzsteuergesetz (Vermögenszumachssteuergesetz) nebst Gesetz über Aenderungen im Finanzwesen.* (Berlin: Vahlen. 1913. Pp. 112. 1.20 m.)

Pauperism and Charities

NEW BOOKS

ASHBY, A. W. *One hundred years of poor law administration in a Warwickshire village.* (New York: Oxford University Press. 1913. \$4.15.)

DAVEY, H. *Poor law settlement and removal.* Second edition. (London: Stevens & Sons. 1913. 15s.)

FUNK, M. J. *Geschichte und Statistik des bremischen Armenwesens.* (Bremen: F. Leuwer. 1913. Pp. vi, 195.)

——— *Poor laws and relief of distress. Royal commission. Appendix.* Vol. XXXVII. Cd. 5443. (London: Wyman. 1913. 8s. 7d.)

Socialism and Co-operative Enterprises

Coöperation in Agriculture. By G. HAROLD POWELL. (New York: The Macmillan Company. 1913. Pp. 327. \$1.50.)

The most frequent objection urged against books dealing with coöperation is that they are written by enthusiasts, by dreamers, by those who consider it a cure-all for various economic and social evils. But in Powell's *Coöperation in Agriculture*, the author, although a staunch advocate of coöperative principles, gives the reader a volume that avoids criticism on that score and at the same time constitutes a most excellent and noteworthy contribution to the literature of the subject.

Mr. Powell is a thoroughly practical and experienced coöperator and for some years past has been the manager of the California Fruit Growers Exchange, one of the most successful coöperative enterprises of its character in the United States. He knows, as few others do, the dangers and the advantages of coöperative activity, and at no time throughout his discussion does he stress one at the sacrifice of the other. He frankly confesses that few of the attempts at coöperation

have been successful, and it is probably not overstating the case to say that still fewer have been founded on principles which if generally adopted would help in the solution of the rural economic and social problem. . . . Many of them have been formed by impractical enthusiasts with high motives but with little business experience, de-

siring to reform everyone except themselves, to wage war on their neighbors who do not affiliate, to fight every competitor, and to found the organization on enthusiasm, altruism and general discontent.

On the other hand, however, he maintains that there is much in coöperative endeavor to commend itself to those who will approach it in a sane and businesslike manner.

The fundamentals of agricultural coöperation are declared to be: (1) The successful coöperative organization must be founded on a special industry such as cotton, tobacco, milk, butter, poultry, small fruits, and the like. (2) The area which it covers must be comparatively small in extent. (3) The population of the community must be of a stable character. (4) The association must be started only after the farmers have felt the pressing need of getting together. (5) There must be federation with a considerable amount of autonomy for the constituent local associations. Considerable space is devoted to a discussion of the form of organization, the legal principles involved, the matter of finances, and the more important difficulties to be overcome.

Practically two thirds of the volume is taken up with an exposition of the methods of various coöperative enterprises of interest to the farmer, such as the breeders' and growers' associations at home and abroad, the associations which market grain, eggs, milk, butter, cotton, and fruit, and those which carry on irrigation projects, mutual insurance, the purchasing of supplies, the establishment of rural credit, and the construction and management of rural telephones. A short bibliography of the more important references is also included.

Mr. Powell has not attempted to cover the entire field of agricultural coöperation, but has confined himself to its more important phases. His work shows a grasp of the issues involved and a ripeness of conclusion that comes only from actual contact with the practical side of coöperation.

IRA B. CROSS.

Stanford University.

The Servile State. By HILAIRE BELLOC. (London: T. N. Foulis. 1912. Pp. 189. 2s. 6d.)

The Real Democracy. (*First Essays of the Rota Club.*) By J. E. F. MANN, N. J. SIEVERS, and R. W. T. COX. (London: Longmans, Green and Company. 1913. Pp. x, 276. \$1.50.)

These two books are from the same group of thinkers and represent the same point of view. Mr. Belloc leads off with a

sharp attack upon the modern industrial system including the modern trend of economic reform. His disciples of the Rota Club in *The Real Democracy*, which is inscribed to Mr. Belloc, labor the same points more exhaustively and then disclose their scheme, or perhaps better, their vision of constructive reform. Because of their similarity, the two books may be discussed together.

The main thesis may be summed up in a few words. The next stage in economic evolution is to be a servile state "in which those who do not own the means of production shall be legally compelled to work for those who do and shall receive in exchange a security of livelihood"; in other words, the wage-earners have become enslaved. The inevitableness of this next stage arises from the fact that the present form of social organization is unstable because "the ownership of the means of production is confined to a body of free citizens not large enough to make up properly a general character of that society." For this condition of affairs there are two possible solutions: (1) A return to the idyllic condition of the Middle Ages when "slavery had gone and in its place had come that establishment of free possession which seemed so normal to men and so consonant to a happy human life"; or (2) the adoption of collectivism.

The former is a reaction to which, unfortunately, society does not lend itself readily; while those who aim to occasion the latter will be warped from their purpose by the forces of circumstance. The so-called moral basis of property and the complexities of modern property rights, Mr. Belloc admits, make it inexpedient to confiscate all property and "the proposition to buy out the capitalist in lieu of appropriating him is vain." Thereupon social reformers will have recourse to "measures to secure security and efficiency." This involves loss of legal freedom for the wage-earner but offers "the very real prospect of having enough and not losing it." Consequently, this opportunity will be eagerly grasped by the poverty-stricken proletariat.

The handle to this line of argument lies in the English employers' liability act, the insurance act, the minimum wage boards, and similar acts of legislation. These furnish examples, he believes, of status taking the place of free contract, because in these matters capitalists and wage-earners are classified *as such* and differ as to legal disability and obligation. Moreover, "the principle of a minimum wage involves as its converse the principle of compulsory labor" and with this the demonstration is completed. This is Mr. Belloc's challenge to the modern industrial movement.

In *The Real Democracy* the challenge is taken up and argued to great length but in no wise differently. The second book, however, goes beyond destructive criticism and holds up as a new ideal the associative state which is to be composed of an association of city states which in turn are to be organized on the principle of association. These associations, really guilds, are to "own as corporations a proportion of their capital, remunerate their members partly in wages or salary, partly in dividends representing the remainder of the capital contributed by the members."

The whole scheme as worked out results in a blend of syndicalism and debilitated state socialism. The state as a political organization, indeed, is to remain, but apparently is to be a secondary factor.

A guild ought to be able to plan its own activities directly and as a whole and not to find the expression of its general will conditioned and hampered at every point by the wills of state officials elected or appointed.

On the other hand, it is for the state to "require a standard." The latter proviso is not clearly worked out; and how it would be possible, in view of the wide liberty that is to be given to the guilds, for the state to effectively require this standard does not appear. It would seem that these thinkers have endeavored to work out equality in terms of economics with a background of natural rights theory, an attempt in the nature of things bound to be rather futile in the twentieth century.

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L'Evolution Historique du Socialisme Moderne. By M. TOUGAN-BARANOWSKI. Translated by JOSEPH SHAPIRO. (Paris: Librairie Marcel Rivière et Cie. 1913. Pp. 246. 5 fr.)

The book is divided into four main parts consisting of an introduction, a criticism of the capitalistic organization, an outline of the proposed socialistic organization, and the method of bringing the latter to pass.

In the introduction is found an exposition of socialism, which is contrasted with individualism and anarchism. The author believes that since no genuine individualism can develop except in society, the highest type of individualism can develop only in a socialistic society. The present "anarchy in production" he condemns not alone because it dooms the laborer to poverty, but because it is

unable to produce anywhere near the amount possible under a rational, harmonious system. As to the socialist state the author believes in centralization of authority, but would nevertheless leave as much as possible to voluntary association. Anarchy and socialism are opposing concepts, though there will no doubt be many associations in the future, scientific, literary, and the like, run on the plan of anarchism, that is, with perfect freedom to the individual. This does not, however, suggest the possibility of applying the plan to the state. The ideals of socialism are to be realized not all at once but gradually. Socialism is coming through evolution, but it should be helped along by the conscious effort of mankind. The abolition of the right of inheritance and the imposition of a strongly progressive income tax would make the final acquisition of the means of production comparatively easy.

The author traces the development of socialistic ideas and treats men and schools incidentally. There is little new in the book but it treats clearly and sympathetically the development of the doctrine of modern socialism.

B. H. HIBBARD,

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NEW BOOKS

- COLE, J. R. and SILVER, G. *Socialist dialogues and recitations.* (Chicago: Kerr. 1913. Pp. 59. 25c.)
- DAVIES, E. *The case for nationalisation.* (London: Collins. 1913. Pp. 257. 1s.)
- DOMACK, H. *Der Genossenschafts-Sozialismus.* (Leipzig: Ernst Möhrings Verlag. 1913. Pp. viii, 127. 2 m.)
- ENGELS, F. and MARX, K. *Briefwechsel 1844-1883.* Edited by A. BEBEL and E. BERNSTEIN. Four volumes. (Stuttgart: J. H. W. Dietz. 1913. 40 m.)
- GOLLANCZ, V. *Dialogue on socialism.* The Chancellor's latin essay, 1913. (London: Blackwell. 1913. 1s. 6d.)
- GREENE, T. E. *Socialism in faith and practice.* (St. Louis, Mo.: National Rip-Saw Pub. Co. 1913. Pp. 40. 10c.)
- ISSAIEFF, A. A. *Individualität und Sozialismus.* Authorized translation from the Russian by KARL KUHLS. (Berlin: Prager. 1913. Pp. 92. 1 m.)
- KIRKUP, T. *A history of socialism.* Fifth edition, revised and edited by E. R. PEASE. (London: Black. 1913. 5s.)
- MILLAR, G. T. *Constructive socialism.* (Los Angeles, Cal.: Voluntary Coöperative Association. 1913. Pp. 37. 10c.)

- PEASE, E. R. *Profit-sharing and co-partnership: a fraud and a failure?* Fabian tract, 170. (London: Fabian Society. 1913. Pp. 16. 1d.)
- SCHLOESSER, H. H. *The nationalization of mines and minerals bill.* Fabian tract, No. 171. (London: Fabian Society. 1913. Pp. 15. 1d.)
- ROBERTS, I. *Looking forward; a study in social justice looking to coöperation as offering the solution of difficulties.* (Philadelphia: Roberts & Co. 1913. Pp. 5, 315. \$1.)
- ROBINSON, M. F. *The spirit of association: being some account of the guilds, friendly societies, coöperative movement, and trade unions of Great Britain.* (London: Murray. 1913. Pp. 403. 6s.)
- WILBRANDT, R. *Die Bedeutung der Konsumgenossenschaften.* (Göttingen: Vandenhoeck & Ruprecht. 1913. Pp. 28. 0.50 m.)
- ZETKIN, K. *Karl Marx und sein Lebenswerk! Vortrag. Mit einem Anhang: Literatur über Marx und von Marx.* (Elberfeld: Freie Presse. 1913. Pp. 47. 0.25 m.)

Statistics and Its Methods

La Théorie de l'Homme Moyen. Essai sur Quetelet et la Statistique Morale. By MAURICE HALBWACHS. (Paris: Librairie Félix Alcan. 1913. Pp. 180. 2.50 fr.)

In this very interesting little volume on a much debated statistical subject there are five chapters, of which the first and the fourth are respectively descriptive of Quetelet's conception of the average man physically and morally viewed. The second and third chapters are critical of the physical concept and the fifth of the moral. A conclusion gives a resumé of the principal views of the author. The presentation of Quetelet's views is systematic and faithful; but as indicated below the interpretation is not always adequate. In the critical chapters, are taken up in turn many of those problems regarding the average man which have been objects of dispute for half a century—the reality of the average man, the average as a type of the species, the perfect in beauty and goodness, its relation to birth and death statistics, the equality of the sexes, and the significance of the so-called "tendency" to commit crime. One is struck with the complete absence of references to the problem of free will which one must struggle to avoid in writing about Quetelet and to which another recent writer in this field has devoted considerable attention.¹

¹ *Quetelet: Statisticien et Sociologue*, by Joseph Lottin (Félix Alcan, 1912). Reviewed by present writer, in *Political Science Quarterly*, vol. xxvii, pp. 718-723.

Two views characterize the author's criticisms throughout. In the first place he thinks the conception of the average man is not in harmony with that theorem of probabilities which requires that the elements involved shall be independent of each other. This point is repeatedly insisted upon (pp. 53, 97-8, ch. 5, conclusion, *passim*). That is, the average man does not result from the statistical massing of many unrelated and wholly disparate men, but rather is the result of measurements on many men related by multitudes of physical and social bonds, and therefore mutually dependent. As a consequence, the author holds, the theory of probabilities cannot apply. Here also hinges the second characteristic of the author's views—namely, that biological and social conditions are competent to explain statistical results and therefore the probabilities theory need not be intruded.

To make the author's meaning clear let us take the distribution of heights. He holds that in order for the theory of probabilities to apply one must establish that the persons measured "are independent one of another and of all those who have preceded them," (p. 163). But now since the young men aged twenty of a nation are related and mutually dependent, "the conditions in which the theory of probabilities might apply are not realized" (p. 164).

Here is truth mingled with error. Undoubtedly the individuals of a nation are related and mutually dependent, but it is equally undoubted that the theory of probabilities does apply. This is merely a statement of fact. The work of Quetelet on this point has been so fully supplemented by that of Galton, Pearson, and the anthropologists that mere opinion to the contrary counts for naught. When our author goes to the extent of dispensing with the law of large numbers on the purely theoretical ground that the group studied must be composed of wholly unrelated individuals he likewise runs counter to well-established facts and usage. He thus states the opposite of the fact when he says (p. 174) that society and moral actions constitute "the realm in which the calculus of probabilities is least applicable." And he reveals a lack of full comprehension of statistical method when he adds that Quetelet's theory "from the standpoint of scientific research, presents this great inconvenience, either of condemning us to remain ignorant of causes, or, if we wish to attain them, of engaging in calculations of an infinite complexity" (p. 174-5). Halbwach's theory is contrary not only to fact but to theory as well. Why should not one with equal cogency argue that the

theory of probabilities will not apply to the results of tossing a dozen pennies because the pennies are related, being made from the same substance, molded in the same dies, and thrown from the same hand? The infinite variations in the numerous conditions of heredity and environment make necessary the statistical method developed by Quetelet as a means of finding order in chaos.

The second characteristic of the author's criticisms does not do justice to Quetelet. He repeatedly implies that the latter considered the theory of probabilities as constituting in itself an adequate scientific explanation of the phenomena studied. (See pp. 61 to 69, 89 to 99, 134 to end of ch. 5, and 161 *et seq.*) Indeed, the author seems to think that Quetelet's theory was that statistical regularities are to be explained solely as the chance results of the actions of many detached and unrelated individuals. For this crude explanation the author would substitute those biological and social conditions essential to the appearance of the phenomena. Thus the regular distribution of heights is explained not by the probabilities theory but by "organic constitution, physical milieu, and their mutual adaptations" (p. 68); the equality of the sexes is not to be explained by the laws of chance but by Düsing's theory of auto-regulation "modified by sociological considerations" (pp. 90 *et seq.*); so also other facts (pp. 97-8).

Now all this is to leave out of account Quetelet's whole conception of the "social system" and the consequent emphasis he laid on social factors. Indeed, Halbwachs himself inconsistently emphasizes this (pp. 104 and 133). The more consistent interpretation of Quetelet is that he held the mathematical presentation not in itself an explanation but rather a means whereby the phenomena could be connected with social and physical conditions. The author, following Durkheim, says that in Quetelet's view the "real cause" of the normal is its greater probability and not the relations that may be discovered between the character studied and its conditions of existence. Now it is true that Quetelet held the most frequent result to be the normal, but he sought to connect it and the variations from it with concrete circumstances.

Nevertheless, this volume should be read by all interested in its problems. While it has neither the historical nor philosophical interest of Lottin's work it is more pointed and stimulated.

F. H. HANKINS,

Clark University.

NEW BOOKS

- BALLOD, C. *Grundriss der Statistik: Bevölkerungs- Wirtschafts- Finanz- und Handels-Statistik.* (Berlin: Guttentag. 1913. Pp. vii, 348. 10 m.)
- CONRAD, J. *Grundriss zum Studium der politischen Oekonomie.* Vol. IV. *Statistik.* Part II. *Die Statistik der wirtschaftlichen Kultur: Berufsstatistik, Agrarstatistik, Forst- und Montanstatistik.* Second edition. (Jena: Fischer. 1913. Pp. ix, 273. 6.50 m.)
- RICCI, U. *Statistique internationale des états des cultures.* (La Haye: Société Anonyme "Drukkerij Trio". 1913. Pp. 92.)

Professor Ricci is chief statistician of the International Institute of Agriculture, and has been impressed by the chaotic condition of agricultural statistics as now reported. Especially difficult of comparison are these statistics since unlike expressions are used for designating the same conditions and again identical expressions are used to designate conditions which are unlike.

It is proposed by the author to create a table into which the reported data may be fitted in such manner as to permit the summation of terms both horizontally and vertically. The horizontal sum will give the average acreages for a given country for a period of ten years, the estimated acreages of the current year to be given in the form of a percentage of the ten-year average. In a separate table the same thing will be done for reported yields per acre, and the two combined into a table showing total estimated production. This final table will be called an *indice unitaire*.

In addition to the exposition of the plan proposed there is given an analysis of the present systems of reporting the condition of crops. The systems used are designated by the terms "valuation" and "classification." By the system of valuation the report is in such shape as to express the yield in its mathematical relation to an assumed base. In the system of classification the scale used consists of words such as *poor, fair, good, etc.*, and an exact mathematical deduction is hard to draw. The "valuation" system is preferable.

It is believed that a report based on the known results of the ten preceding years and corrected from month to month during the growing season will result in information which will preclude the probability of artificial prices. Concerted action on the part of the different countries will be necessary in order to carry this plan into effect.

B. H. HIBBARD.

— *Statistics for Hawaii. Containing statistics of population, agriculture, and manufactures for the territory, counties, and cities.* (Washington: Dept. of Commerce. Bureau of the Census. 1913. Pp. 57.)

— *Statistics for Porto Rico. Containing statistics of population, agriculture, and manufactures for the territory, municipalities and cities.* (Washington: Dept. of Commerce. Bureau of the Census. 1913. Pp. 91.)

— *Year-book of the city of Buenos Aires.* (Buenos Aires: Statistical Dept. 1913. Pp. xlviii, 460.)

DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

COLD STORAGE. The Department of Agriculture has published two bulletins dealing with the subject of cold storage. Bulletin 93, *Cold Storage Business Features* (pp. 86), by George K. Holmes, consists of two parts entitled respectively Reports of Warehouses to the Department, and Marketings. The warehouse reports were secured on schedules prepared by the department and covering a period of two years from March, 1909, for poultry and eggs, and from May, 1909, for butter, beef, mutton, and pork. The difference in time represents a rough effort to begin the year at the time when the quantity of the commodity in cold storage begins to increase from the month of lowest ebb.

The facts brought out in part I fall into three captions, namely: Length of Time in Storage, Costs of Storage, and Fraction of Production Going Into Cold Storage.

The most significant part of the information on the length of time in storage is set forth in diagrams which show for 1910-1911 the percentage of the year's receipts into storage and of deliveries from storage assignable respectively to each month of the year (p. 29); percentage of receipts into storage for each of the six commodities, 1909-10, delivered after storage of 1, 2, 3, etc., up to 16 months (p. 35); average length of time of storage of receipts of year 1909-10 by months.

Tables show that 36.7 per cent of beef stored was delivered in 1 month and that the bulk of it was delivered before the expiration of 7 months. The largest monthly percentage for mutton was 28.8 in the sixth month, delivery being nearly completed in the eighth month. Delivery of pork was 78 per cent within a month, with about 3 per cent remaining after 3 months; poultry, 22 per cent delivery for the first month, 26 per cent for the second, with the bulk delivered within 8 months. Largest deliveries of butter were 12 to 14.5 per cent each month from second to the sixth month, the bulk being delivered within 10 months; eggs, largest monthly deliveries in sixth month (18 per cent) and seventh (21 per cent), delivery completed in 11 months. The extreme length of time in storage was represented by one warehouse where "there was discovered some fresh mutton that had been in cold storage 27½ months, and this was 10.2 per cent of the fresh mutton receipts of all reporting warehouses for May, 1909," the month when the period of storage began. Of butter, 0.3 per cent of May,

1909, receipts remained $27\frac{1}{2}$ months and 0.1 per cent of poultry remained $26\frac{1}{2}$ months (p. 36).

Taking the storage year 1909-10, which begins for each commodity with the month when increase from the lowest ebb sets in, the percentages carried over to the next year were as follows:

	Beef	Mutton	Pork	Poultry	Butter	Eggs
Year beginning	Sept. 1	Aug. 1	May 1	Aug. 1	May 1	March 1
Per cent carried to next year	9.6	15.1	12.6	7.7	12.5	0.5

The report shows the cost of storage, plus insurance and interest, in relation to the mean wholesale prices of the respective commodities in from 2 to 13 cities during the heavy storage months in 1910-1911. For butter and fresh mutton, which show respectively the lowest and highest percentage of price, the figures are as follows:

Length of storage [in months]		1	3	6	9	12	15
Storage cost as per cent of price	butter	2.4	7.3	14.6	21.9	29.2	36.5
	mutton	3.8	11.5	23.0	34.5	46.1	57.6

The percentage of total production going to storage was found to be 3.1 for beef; 4.1 for mutton; 11.5 for pork; 9.6 for butter; 15 for eggs.

Part II gives tables showing the relative monthly receipts of butter and eggs into New York, Boston, Chicago, St. Louis, and Milwaukee, from 1880 to 1911. These are followed by further estimates and tables to show cold storage as a fraction of supply.

Bulletin 101 (*Cold Storage and Prices*, by George K. Holmes, pp. 116) is an attempt to analyze price movements in the principal storage commodities from 1880 to 1911, comparing especially prices from 1880-1892 with those from 1902-1911. Great pains has been taken to get price quotations for both periods for a large number of cities in different parts of the country. Figures are weighted to show the influence of consumption and the most significant results are reproduced in diagram. Price movements in later years are shown in juxtaposition with storage movements, but there is no discussion of general price influences other than storage, together with its reactions on consumption. The following quotation contains the general conclusion with reference to the steadying influence of storage: ". . . the contention of the cold-storage interests that cold storage has counted for uniformity of prices is largely true, but it is not true for all commodities, nor for all comparisons of years and periods" (p. 69).

The discussion of figures is too detailed for reproduction even in

part; it has to do more largely with method than with conclusions. On the whole, the bulletin is to be regarded as a compilation of material and as such is valuable.

The final paragraph of bulletin 93 contains its conclusion and reflects perhaps the viewpoint of both bulletins. It is as follows:

The validity and significance of the conclusions of this bulletin would gain nothing by any characterization that might be given to them. The facts speak for themselves. The reader must be aware that this investigation has negatived some popular misconceptions with regard to the cold-storage business and has substantially sustained some of the assertions made by cold-storage warehousemen.

The author acknowledges indebtedness to Mr. F. G. Urner of the Urner-Barry Co., and to Mr. F. A. Horner of the Merchants Refrigerating Co. for material and important counsel.

W. E. HOTCHKISS.

In "Farmers' Bulletin" No. 560 of the United States Department of Agriculture (Oct. 11, 1913), several pages are devoted to "The Outlook for Meat Production" (pp. 17-20). It is believed that there are no large foreign supplies available for this country.

Among recent volumes issued by the Department of Commerce are *Commercial Relations of the United States, 1911* (Washington, 1913, pp. 185), a departure in form from the bulky two-volume edition; *Shoe and Leather Trade in Belgium, Spain and Egypt*, by A. B. Butman (Washington, 1913, Special Agents Series, No. 73, pp. 34); *Foreign Markets for Railway Supplies and Equipment* (Washington, July 25, 1913, Special Consular Report No. 60, pp. 224); *Transportation Rates to the West Coast of South America*, by F. J. Sheridan (Washington, 1913, Special Agents Series, No. 72, pp. 99). The last contains data in regard to lighterage, transfer, and other charges at New York and South American ports, the cost of marine insurance, consular fees, distances, and competitive rates from European ports and New York to South America.

At the last session of the Sixty-second Congress, a brief report on *Carey Act Projects* was presented, describing the history and present condition of the enterprises under way. This is the third and final report of the committee. (Sen. Doc. No. 1097, 62 Cong., 3 Sess., Feb. 21, 1913, pp. 22.)

Of international interest is the report on *Production and Marketing of Egyptian Cotton*, by J. S. Williams and Clarence Ousley, made to the American Commission to Investigate and Study Agricultural Credit and Coöperation (Sen. Doc. No. 113, 63 Cong., 1 Sess., June 26, 1913, pp. 10).

Of economic significance, though local in its application, is *A Report of Progress in Soil Fertility Investigations*, by J. G. Hutton, published by the South Dakota Agricultural Experiment Station (Brookings, South Dakota, June, 1913, pp. 235-264).

There is also to be noted *The Illinois System of Permanent Fertility*, by Cyril G. Hopkins, published by the Agricultural Experiment Station of the University of Illinois (Urbana, Illinois, Circular No. 167, May, 1913, pp. 20).

The State Board of Land Commission of Utah has made a new compilation of *State Land Laws, The Carey Land Act, State Laws Accepting Same, and Rules and Regulations Thereon* (William J. Lynch, secretary, Salt Lake City, pp. 85).

The results of two special studies in marketing have been received: *The Organization of a Fruit Distributing System*, by J. Arthur Reed (Salt Lake City, Utah Agricultural Experiment Station, Extension Division, Circular No. 11, pp. 123-136); and *Technical Studies in Egg-Marketing*, by C. W. Thompson (St. Paul, University of Minnesota Agricultural Experiment Station, Bulletin 132, April, 1913, pp. 45). Mr. Reed gives an account of the experience of the California Fruit Growers' Exchange. The question of cold storage is discussed in Professor Thompson's study.

The Department of Social Economics of the London Municipal Society has issued *Notes on the Census of Production (1907)*, in its series of "Statistical and other Memoranda for Political and Social Questions of the Day" (London, 33 Tothill Street, Westminster, S. W., Feb. 1, 1913, pp. 12). The analysis comments upon the low output per head; and, in the light of the statistics afforded, criticism is made of certain claims of socialists in regard to the distribution of wealth.

Corporations

THE STANLEY COMMITTEE REPORT ON THE UNITED STATES STEEL CORPORATION. The report is made up (1) of evidence taken by the committee in the course of its examination of witnesses and reports of its special agents, and (2) of reprints of various investigations previously made by independent officers and organizations and a number of documents given here as exhibits (*Hearings before the Committee on Investigation of United States Steel Corporation*, House of Representatives, 1911-1912, Nos. 1-63, pp. 5594: appendixes, xxiv, 422; xviii, 144; conclusions, 250, 9, 96; index, xlviii). The report of F. J. MacRae, special investigator for the committee, covers some 1100 pages. This includes summaries of earnings, minutes of the

board of directors, executive committee, finance committee, auditors, general managers of sales, traffic association, boards of directors of the various Carnegie companies and other corporations with related interests. It also includes statistical tables showing output and profits with forms of various contracts with coal companies. There is a list of abandoned plans with reasons for abandonment. There is a full index to MacRae's report under the headings: Subjects, Companies and Firms, and Individuals.

The so-called Stanley committee report will probably be more serviceable through its assembling what was already known more or less generally about the Steel Corporation than through what it found as the results of its own inquiries. MacRae's report has added documentary evidence in cases where knowledge was less exact, but the examination of witnesses by the committee has been rather disappointing. The men conducting it were not even reasonably well acquainted with the steel business and could not be expected to display much acuteness in getting new information, beyond details, especially in a field that had been worked over by investigators with some training. The final report of the majority is composed to a considerable degree of extracts from reports of previous investigators. Popularization is the chief result of the committee's work, perhaps its chief aim.

No investigation of "big business" seems to be complete without showing a connection with the Standard Oil Company. Hence there is placed in the record here the story of a transaction in ore lands between the Merritts and John D. Rockefeller. The incident was a closed one before the Steel Corporation was organized. The ostensible reason for its introduction, that it threw light on the problem of the value of ore deposits, is negligible. Moreover, the charges that misrepresentations were made to the Merritts by Mr. Rockefeller or his agents were withdrawn in a statement, dated January 22, 1897, and signed by the whole Merritt family, a score of them.

In view of the suit now in progress against the Steel Corporation any detailed discussion of its character and conduct would be premature and perhaps improper. The more rigorous examination by the court of the same data ought to put students in possession of better digested information than the Stanley Committee has given. Significant new material is not likely to be found at this date. We may now await an interpretation and a judgment.

In detail the report covers the following points: statistics from the reports of seven different railways; shipments, exports, domestic prices, properties purchased; the Interstate Commerce Commission on division of joint rates and other allowances to terminal railroads.

The tenth annual report of the corporation, for the fiscal year ending December 31, 1911, includes data as to annual percentages of production, prices, tonnage, assessed valuation, and rate of taxes on iron mines, and as to relations with other companies and with banks, insurance companies, telegraph companies, etc.

Following page 5594 is the *Report of the Commissioner of Corporations on The Steel Industry* (62 Cong., 3 Sess., H. R. No. 1127, pp. 212). With it are bound bills followed by agreements framed to protect and regulate trade, and Mr. Littleton's dissent from the bill presented by the majority together with his general views. Part II of this report contains the views of the minority. Part III consists of a supplementary report on the facts by H. O. Young and the separate views of Mr. Sterling.

In addition to MacRae's special index mentioned above, there is a good general index.

C. C. ARBUTHNOT.

THE SANATOGEN CASE. The decision of the Supreme Court in the Sanatogen case (229 U.S.) goes far toward reassuring those who feared that the privileges already enjoyed under the patent law would be further extended by judicial legislation. O'Donnell, a druggist in New York city, purchased sanatogen of one Hehmeyer, the agent and licensee of Bauer and Co. of Berlin, and sold the same at less than the established price. When this practice came to the notice of the said Hehmeyer, he refused to sell further to O'Donnell. The latter then purchased sanatogen of jobbers located in the District of Columbia and continued to sell at cut prices. Suit was then brought by Bauer and Co. and the Bauer Chemical Company against O'Donnell for the purpose of preventing O'Donnell from continuing to sell sanatogen at less than the price fixed by the patentees.

Sanatogen was sold to the trade in sealed packages, under letters patent No. 601, 995, bearing a notice of the established price and stating that any sale at a less price would constitute an infringement of the patent, and stating that persons so selling would be liable to injunction and damages.

In the prosecution of the case the plaintiff depended chiefly upon the case of *Henry v. Dick* (224 U.S.) referred to in the REVIEW of September, 1912 (vol. II, p. 720). The court, however, held that the case was dissimilar both from the legal and the economic point of view. In the first place, the article in question was sold—not licensed for use; and, second, the proprietors had no economic interest in sanatogen after its sale, whereas, the Dick Company relied for profits chiefly upon the sale of the articles necessary for efficient operation.

Continuing, the court held that the real question was whether in the exclusive right to vend there is also the right to dictate the price at which the article may be resold. Attention was called to the copyright law and the case of *Bobbs-Merrill v. Straus* (210 U.S. 339) in which the meaning of the word "vending" was considered. It was held that "vend" in the patent law and "vending" in the copyright law were one and the same in meaning, and that while Congress granted the exclusive right to sell in each case, there was no grant of the privilege of keeping up prices and preventing competition by notices restricting the price at which the article might be resold. Accordingly, as in the *Bobbs-Merrill* case, the court held that the right to the exclusive sale of an article did not confer the right to fix the price at subsequent sales.

It is significant, in view of the fears sometimes expressed that the domain of monopoly is likely to be enlarged through a too liberal interpretation of the patent law, to note that the court stated that while the act should be fairly or even liberally construed in order to secure its beneficent effects, "care should be taken not to extend by judicial construction the rights and privileges which it was the purpose of Congress to bestow."

MAURICE H. ROBINSON.

Part III of the *Report of the Commissioner of Corporations on the Steel Industry*, devoted to a consideration of cost of production, and representing the full report of the Bureau of Corporations, appeared under date of May 6, 1913 (Washington, pp. 569). This is probably the most intensive accounting study that has yet been made of an important industry.

In the *REVIEW* for June, 1913 (vol. III, p. 454), note was made of the report of the Senate Committee on Interstate Commerce. Since that date there has appeared the two-volume edition of the report, with hearings, digest, and index (pp. xxv, 2954). The digest (pp. 2804-2935) of testimony, with page references to the full record, should prove helpful to students of the trust problem.

An Address to the Boston Chamber of Commerce, by Howard Elliott, the new chief executive officer of the New York, New Haven and Hartford Railroad, September 30, 1913, is of interest as not only describing a great railroad system, but as showing the changing point of view of railway managers in matters involving public control.

Bulletin 14 of the Railway Business Association is entitled *Railway Income Still under 1910* (30 Church St., New York, Sept. 3, 1913, pp. 15).

A committee on railway mail pay, representing 264 railway companies has issued *The Railroads' Appeal for Fair Payment for Carrying the People's Mail* (Ralph Peters, president of Long Island Railroad, Aug. 1, 1913, pp. 8).

The Rehabilitation of the Santa Fe Railroad System, by Charles S. Gleed, has been reprinted from the "Santa Fe Employees' Magazine" (pp. 26). It is an interesting historical narrative.

In connection with the current movement on the part of the railroads to secure an advance in rates is to be noted an address by B. A. Worthington, president of the Chicago and Alton Railroad, delivered September 23, 1913, before the Central Manufacturing District Club (pp. 21); and also a pamphlet entitled "*Commerce Commission's Patriotic Duty*," an Editorial from the *Philadelphia Public Ledger* May 4, 1913, and an Article by Daniel Willard, President of the *Baltimore & Ohio Railroad* (pp. 16).

The London Municipal Society has made an analysis of a recent paper of the British Board of Trade (No. 287 of 1913) on state operated railways, under the title *State Railways* (2 Bridge St., Westminster, S. W., Sept., 1913, pp. 19), which affords a convenient statistical summary of recent operations and finance in different countries.

The issue of September 9, 1913, of the "I. B. A. of A. Bulletin" (111 West Monroe St., Chicago) contains an abstract of the laws of each state relating to public service and railroad commissions. The report was prepared by George W. Kendrick III, of Philadelphia, chairman of the Committee on Public Service Corporations of the Investment Bankers' Association of America.

Additional record of the Haverhill Gas Case in Massachusetts is to be found in the *Twenty-Eighth Annual Report of the Board of Gas and Electric Light Commissioners*, for 1912 (Boston, 1913, pp. 284, 432; see pp. 41-60).

Other reports of public service commissions recently published are *Sixth Annual Report of the Public Service Commission, Second District, New York, for 1912* (Albany, 1913, Vol. 1, pp. 1020; Vol. 2, *Abstracts of Reports*, pp. 412); *Forty-Second Annual Report of the Railroad and Warehouse Commission of Illinois*, for 1912 (Springfield, 1913, 2 vols., pp. 673, 531); *Twenty-Eighth Annual Report of the Railroad and Warehouse Commission of Minnesota*, for 1912 (Minneapolis, 1913, pp. 789).

The Public Service Commission of New York for the First District

has issued a pamphlet entitled *New Subways for New York. The Dual System of Rapid Transit* (June, 1913, pp. 83), in which the scope of the new contracts is described.

The determination of the reasonableness of gas rates charged by a public service gas company is reported upon at length in the *Third Annual Report of the Board of Public Utility Commissioners of New Jersey* for 1912 (Trenton, 1913, pp. 504; see pp. 246-310).

Note should have been made in an earlier issue of *Rates of Public Utilities in Wisconsin, Part I, Electric Rates, A Compilation of Rates in Force June 1, 1912* (Madison, 1912, pp. 234). Rates are given by towns for each specialized form of service.

On October 10, before a committee of the Chicago City Council, Mr. E. W. Bemis argued against accepting going value as a basis for fixing rates.

Mr. David J. Lewis, representative from Maryland, who has been so active in securing the establishment of a parcel post, has published as a public document *Brief for a General Parcel Post* (Washington, 1913, pp. 58). This contains statistical analyses and charts.

The Investment Bankers' Association of America has been engaged during the past year in making a vigorous campaign in behalf of wise supervision of the sale of securities, in place of the radical "blue sky" legislation which is proposed in some states. Among the publications for which this association is responsible are to be noted the "I. B. A. of A. Bulletin" for April 26, July 7 and 29, 1913 (111 West Monroe St., Chicago), containing the text of "blue sky" law in different states; the *Draft of a Bill to Regulate the Sale of Securities and a Discussion of the Measure* (pp. 14); "*Blue Sky*" *Legislation in Massachusetts*, a memorandum prepared by Ropes, Gray and Gorham (March, 1913, pp. 10); *Bill of Complaint Filed in the United States District Court at Detroit, Michigan, to Test the Michigan Blue Sky Law* (pp. 39); and a *Bill of Complaint Brought before the United States District Court of the Southern District of Iowa*, by William R. Compton Co., etc. *vs. W. S. Allen, etc.*, filed September 5, 1913, to test the Iowa "blue sky" law (pp. 40). Copies of these pamphlets may be had upon application to W. H. Lyon, assistant counsel, 141 Broadway, New York.

Labor

WOMAN AND CHILD WAGE-EARNERS IN THE UNITED STATES.¹ The publication of volumes XIV, XVIII, and XIX completes the federal

¹See AMERICAN ECONOMIC REVIEW, vol. II, p. 436; vol. III, p. 195.

report on the condition of woman and child wage-earners in the United States.²

Volume XIV is a report of the causes of death among woman and child cotton-mill operatives, based on an inquiry concerning persons aged ten years and over who had died in certain cotton-manufacturing cities of the South and New England in the period 1905-1907. The Southern data proved too inaccurate to allow a fair comparison of all figures from the two regions, and the investigation is practically confined to Fall River, Manchester, and Pawtucket. A comparison of death-rates in selected groups and from various causes shows the hazard of female operatives to be greater than that of male operatives or of female non-operatives, especially from tuberculosis. "In the age groups, 15-24, 25-34, and 35-44, the death-rates [of women operatives] from tuberculosis were respectively two and one quarter, two and one half, and five times those among women of the same age groups outside the cotton industry" (XIV, 32). Operative work appears extremely harmful to married women, their death-rate from all causes being strikingly higher than that of single operatives, and their hazard from child-birth double that of non-operative women.

Volume XVIII contains reports on 23 manufactures,³ in 17 states, concerning the employment of women and children. The survey covered 442 establishments employing 112,450 workers, 56.9 per cent of whom were women and children under sixteen. Children were 7.1 per cent of the whole groups, but a smaller proportion in 13 industries.

² *Report on the Condition of Woman and Child Wage-Earners in the United States* (61 Cong., 2 Sess., Sen. Doc. No. 645, 1912-1913), prepared under the direction of CHARLES P. NEILL and under the immediate direction and supervision of CHARLES K. VERRILL. XIV, *Causes of death among woman and child cotton-mill operatives*, by ARTHUR R. PERRY, 1912, pp. 430; XVIII, *Employment of women and children in selected industries*, 1913, pp. 531; XIX, *Labor laws and factory conditions*, 1912, pp. 1125.

³ Canning and preserving, fruits and vegetables	Hosiery and knit goods
Canning and preserving, oysters	Jewelry
Cans and boxes, tin	Needles and pins
Cigar boxes	Nuts, bolts and screws
Cigarettes	Paper boxes
Cigars	Pottery
Clocks and watches	Rubber and elastic goods
Confectionery	Skirts, overalls and underwear
Core making	Stamped and enamelled ware
Corsets	Tobacco (smoking and chewing) and snuff
Crackers and biscuits	Woolen and worsted goods
Hardware and metal specialties	

Women formed 8.6 per cent to 84.7 per cent of the employees in the several industries, and were typically one half or more of the working force. The occupations within each industry are described, and the sex, age, race, and conjugal condition of employees, their hours and other conditions of work are reported for the establishments visited. The hours and earnings stated are those of a working week, usually the week preceding the inquiry, and consequently are not always typical. They often show a wage above the average, as is noted in the reports on various industries (XVIII, 276, *passim*). Nevertheless, the wage-level recorded is appallingly low. "Of the 38,182 women, all 18 years and over, for whom the facts as to age and earnings were gained, one eighth earned under \$4, and two fifths under \$6, during the week studied. Practically only one tenth reached or passed \$10" (XVIII, 23). Remarkable local variations appeared in wages and general working conditions. Hours, safety provisions, sanitation, "these and many other points depend, not upon the worker, not even upon the industry, but very largely upon the attitude of the individual employer. . . . And when it comes to the question of wages, the lack of standardization seems to have reached its height" (XVIII, 35).

Volume XIX reports upon the administration and operation of state labor laws. It is limited to 17 states and to laws applying to factories and workshops. Reference to printed statutes and judicial decisions has been supplemented by interviews with enforcing agents to learn their interpretation of obscure laws and of laws allowing them large discretionary powers. Actual working conditions were studied in 563 establishments representing 58 industries. The laws and conditions reported are those in force at the time of the field work, December, 1908 to April, 1909, with footnotes, quoting important laws enacted up to January 1, 1910. Appendixes contain laws in force January 1, 1912, concerning women's and children's employment and the regulation and inspection of factories and workshops.

EMILIE LOUISE WELLS.

Vassar College.

MINNESOTA COMPENSATION LAW, 1913. Minnesota has enacted a quasi-voluntary compensation law (*Laws, 1913*, ch. 467). For employers to whom the compensation feature of the law applies and who do not accept it, the defenses of assumed risk and fellow servant are abolished, and contributory negligence is supplanted by willful negligence. Willful negligence, furthermore, is made a question for the jury and the burden of proof is placed on the employer. The old defenses hold if the employer accepts the compensation law and his

workers do not. Interstate employees, domestic servants, farm laborers, and casual employees not working in the line of the employer's business or occupation do not come under this compensation law. Voluntary agreement to the law between employer and worker is assumed, unless notice is given to the contrary. Self-inflicted injury and intoxication as a cause of injury are bars to the recovery of compensation, but the burden of proof is on the employer.

The schedule of compensation to injured workers is as follows: Temporary total disability, 50 per cent of wages with a maximum of \$10 and a minimum of \$6 a week, and a time limit of 300 weeks; if wages are under \$6 a week, the full amount of wage is payable. Temporary partial disability, 50 per cent of loss of earning power with the same 300-week limit. Permanent partial disability, on extent of that disability, according to a definite schedule, for example: loss of thumb, 50 per cent of wages for 60 weeks; index finger, 60 per cent for 35 weeks; second finger, 50 per cent for 30 weeks, and so on. The limits of \$10 and \$6 a week hold for permanent partial disability and for permanent total disability. Permanent total disability is defined as loss of both hands, both arms, both feet, both legs, both eyes, or any two of these members or organs, total loss of mental faculties, or total paralysis of both legs or both arms. Here a time limit of 400 weeks' compensation is fixed.

Compensation to dependents is as follows: The widow is to receive 35 per cent of deceased's monthly wages, and for one child 5 per cent additional. Two or three children bring in 15 per cent, making with the widow's 35 per cent a total of 50 per cent. Four or more children are entitled to 25 per cent, making in such cases a total of 60 per cent payable to the widow. The \$6 and \$10 a week limits, the 100 per cent provision of wages under \$6 a week, and the 300-week limit hold here also. A widow remarrying will receive in a lump sum half of the compensation still to be paid unless she has children, in which case the balance of her compensation will go to them. Orphans without parents are to be compensated as follows: 40 per cent for one orphan, 10 per cent for the second orphan, 10 per cent for a third, or a maximum of 60 per cent. A dependent husband is to get 25 per cent; a parent, 25 per cent; two parents, 35 per cent; a dependent brother, sister, or grandparent, 25 per cent; two such relatives, 30 per cent.

In cases of no dependents the following are payable: expenses of last illness, burial expenses up to \$100, medical and surgical treatment, and the necessary devices and medicines to be supplied by employer in all cases of injury for up to 90 days and with a \$100 limit, except that the court may allow an additional \$100.

Except as to medical and surgical treatment, no compensation is paid in the first two weeks after injury. The employer should be notified of accident within 14 days, but 30 days is allowed unless the employer can show that delay has been prejudicial to him, and 90 days if the worker can show that the delay was due to mistake, ignorance, or inability upon his part, or fraud upon the part of the employer. Disputes are to go to the district court. Commutation to lump sum payments can be made with approval of the court where payment is for death, for permanent total disability, or for permanent partial disability. If compensation runs over 6 months, readjustments may be made.

RAYMOND V. PHELAN.

University of Minnesota.

MINNESOTA MINIMUM WAGE LAW, 1913. The persistent work of Dr. John A. Ryan and others in Minnesota for a minimum wage law has been rewarded in the enactment of chapter 547, *Laws, 1913*. The law provides for a commission to be made up of the state commissioner of labor, an employer of woman labor, and a woman who is to be the salaried executive officer of the commission. The state commissioner of labor, Hon. W. E. Houk, is the chairman of this commission, A. H. Lindeke, of Lindeke, Warner & Sons, a wholesale dry goods house of St. Paul, is the employer member, and the executive officer and secretary is Eliza P. Evans, a Minneapolis lawyer, trained in social economics at the University of Minnesota.

A living wage is defined by the law as being sufficient to maintain the worker in health and to supply him or her with the necessary comforts and conditions of reasonable life. The commission is to investigate the wages of women and minors at its own discretion, or upon the request of 100 persons in any occupation employing "women and minors." (It would perhaps be better if it were "women or minors.") Employers are required to keep a register showing the name, address, wages, and hours of each woman and minor employed. There is no provision, however, whereby these registers must be sworn to unless they are brought into a wage hearing. Furthermore, some contend that these registers should be open to the inspection of organizations working for better labor conditions. The law gives the usual powers to hold hearings, subpoena witnesses, administer oaths, and exact testimony and evidence.

When the commission is satisfied that one sixth of the women or minors in an occupation are receiving less than living wages, it may establish a legal minimum for that occupation. Wages are to be

determined for women and minors of ordinary ability, and also for learners and apprentices. An established wage may rule throughout the state or within a restricted area only. There may be special wage rates, by licenses, for women physically defective; but women of this class shall not exceed one tenth of the whole number of workers in any establishment. Penalties of from \$10 to \$50 or 10 to 60 days are to be imposed for violation of the decrees of the commission. Discrimination against an employee who testifies is prohibited. The difference between legally minimum wages and wages actually received is made recoverable by suit together with attorney's fees and costs.

Provision is made for an advisory board in every occupation. These boards, to serve without pay, are to be constituted of three to ten persons, representing employers, an equal number representing workers, and one or more disinterested persons (not to exceed the number of representatives of either of the other parties). At least one fifth of any board shall be women and at least one representative of the public shall be a woman. The commission is to make rules and regulations governing the selection of members and the procedure of the advisory boards, which have equal powers with the commission in obtaining data in regard to wages and standards of living. By a majority vote an advisory board may recommend wage rates, to be reviewed and passed upon by the commission.

RAYMOND V. PHELAN.

A minute and special study of *Wages and Hours of Labor in the Lumber, Millwork and Furniture Industries, 1890 to 1912*, has been made by the federal Bureau of Labor Statistics under the direction of Fred C. Croxton (Washington, Aug. 14, 1913, pp. 178). The increase of wages between 1890 and 1912, per hour, is found to be 29 per cent. The bureau is to be commended in thus undertaking to analyze wages intensively for separate industries.

A more comprehensive report by the same bureau is *Union Scale of Wages and Hours of Labor 1907 to 1912* (Aug. 15, 1913, pp. 121). This covers 40 trades in 39 industrial cities. In certain trades wages are shown back to 1890.

Employers Welfare Work is the subject of bulletin 123 of the United States Bureau of Labor (Washington, May 15, 1913, pp. 80), prepared by Elizabeth L. Otey. Studies are made of some 50 establishments in about a dozen representative lines of industry.

The United States Bureau of Labor Statistics is publishing a separate series of studies in regard to the employment of women in industry.

No. 2 of this series is entitled *Working Hours of Women in the Pea Canneries of Wisconsin* (May 5, 1913, pp. 54); and No. 3, *Employment of Women in Power Laundries in Milwaukee* (May 15, 1913, pp. 92). Each of the studies was made by Marie L. Obenauer.

The bureau has also published *Wages and Hours of Labor in the Cotton, Woolen, and Silk Industries, 1890 to 1912* (Aug. 14, 1913, pp. 206); *Ten-Hour Maximum Working-Day for Women and Young Persons* (No. 118, Apr. 10, 1913, pp. 71); and *Prohibition of Night Work of Young Persons*, No. 117, Apr. 10, 1913, pp. 74.

The Bureau of Mines has recently published a pamphlet on *Sanitation at Mining Villages in the Birmingham District, Alabama*, by Dwight E. Woodbridge (Washington, Department of the Interior, 1913, pp. 27). As a result of improvements during the past few years there has been an increased efficiency of workmen.

The *Report of the Special Commission to Investigate the Conditions of Wage-Earning Women and Minors in the State, 1913*, represents an investigation ordered by the legislature of Connecticut in 1911 (Hartford, 1913, pp. 297). Owing to lack of adequate opportunity the inquiry was limited to the textile, corsets, and metal trades; 50 factories were investigated in 14 localities; wage data were collected from 9103 women.

Dr. C. C. Williamson has prepared for the New York Public Library a bibliography on *The Minimum Wage. A Preliminary List of Selected References* (New York, 1913, pp. 9). Suggestions of additional titles are invited.

The British Board of Trade has published the eighth volume of the *Report of an Enquiry into the Earnings and Hours of Labour of Work-people in the United Kingdom* (London: Wyman, 1913, pp. xxxv, 298). For earlier issues see REVIEW, volume II, page 446. This volume covers some 40 different industries, including the paper, printing, pottery, brick, glass, chemical, tobacco, and food trades.

In 1912 the Commonwealth Bureau of Census and Statistics of Australia began the publication of labor statistics. Two volumes were published by the Labour and Industrial Branch; *Prices, Price Indexes and Cost of Living in Australia* (Dec., 1912) and *Trade Unions, Unemployment, Wages and Cost of Living* (April, 1913). In May of this year it began the issue of a quarterly "Labour Bulletin." No. 2 (August, 1913) contains an abstract of the laws of the several Australian states on workmen's compensation (pp. 132-138).

Bulletin 111 of the Bureau of Labor is a review of *Labor Legislation of 1912*, by Lindley D. Clark (Washington, Dec. 13, 1912, pp. 263). This is the fourth annual review of labor legislation made by the bureau. A useful table shows the principal features of laws relative to workmen's compensation and insurance, in which specific references are given to statutes. Fifteen states shared in this legislation. The bulk of the bulletin is made up of copies of laws, preceded, however, by a topical analysis. There is also a cumulative index of previous bulletins dealing with legislation, and decisions relating thereto.

The Federal Bureau of Labor Statistics has reprinted with an explanatory introduction the *Report of the Industrial Council of the British Board of Trade on its Inquiry into Hospital Agreements* (Aug. 18, 1913, pp. 41).

Bulletin No. 2 of the Nebraska Legislative Reference Bureau contains the *Preliminary Report; Employers' Liability and Workman's Compensation Commission* (Lincoln, Dec. 20, 1912, pp. 48). Tables are given showing "court business from personal injury cases." In 95 cases reported upon, \$29,666 was given in judgments for the plaintiff.

Mr. I. N. Day has made a *Compilation of Opinions and Decisions upon the Subject of Employers' Liability and Workmen's Compensation, together with Statistics and Legislation Applicable Thereto* (Portland, Oregon, 1913, pp. 92). There are chapters on common law rules, opinions of publicists, and remedial legislation.

There is also to be noted the *Report of the Missouri Commission on Employers' Liability and Workmen's Compensation* (Jefferson City, Jan., 1913, pp. 145). This is largely made up of testimony at hearings.

The Industrial Accident Board of California has published a pamphlet on *Reports of Cases* determined in 1912 (Sacramento, 1913, pp. 58).

The subject of arbitration is also treated in a report of the Committee on Interstate Commerce, *Mediation, Conciliation, and Arbitration in Controversies between Railway Employees and their Employers* (Sen. Rep. No. 72, 63 Cong., 1 Sess., July 10, 1913, pp. 100). The report occupies but two pages followed by the hearings.

The Bureau of Statistics of Massachusetts has published in advance, part II of its annual report for 1912, entitled *Labor Bibliography 1912* (Boston, State House, July 15, 1913, pp. 71). Books and periodical titles are grouped under 30 sections.

The Bureau of Labor and Statistics of Arkansas has recently issued *The Compiled Labor Laws of the State of Arkansas* (1913, pp. 64).

The Bulletin of the Industrial Commission of Wisconsin for May 20, 1913, contains a historical account of the operations of the *Wisconsin Free Employment Offices* (Madison, 1913, pp. 193-238).

Money, Prices, Credit, and Banking

THE REVISION OF THE CANADIAN BANK ACT. The Canadian bank act, as is well known, is subject to decennial revision. The last revision was due to take place in 1910; but owing to circumstances which it is not necessary here to describe, it was not until the present year that the work was finally undertaken. The leading features of the Canadian banking system are so well known that they may be passed over, and the nature and causes of the recent changes in the act alone described. There were many minor modifications, but the essential changes effected were: (1) provision for a shareholders' audit, (2) the creation of central gold reserves, and (3) the providing of additional facilities for making loans to farmers.

In the recent revision of the act the public was most deeply concerned with the problem of securing an adequate system of bank inspection. The immediate reason for this was the disastrous failure of the Farmers' Bank. This institution had gambled away its resources on the Keeley mine; and had, in its failure, brought many farmers as well as others to the verge of ruin. For several years previous, however, there had been an insistent demand for some sort of external bank inspection, the principal advocate of the change being Mr. H. C. McLeod, late general manager of the Bank of Nova Scotia. In response to this demand several banks of their own accord had established a shareholder's audit to supplement the ordinary system of internal examination.

The banks as a whole have been opposed to any change in the method of inspection. The reason they advance is that the keynote of the organization of Canadian banks has always been the centralization of responsibility; and they do not think it wise to divide that responsibility with any outside authority. In accordance with this belief they have hitherto depended, and will continue to depend, upon their own officers to safeguard their own interests as well as those of the public. Inspectors appointed by the general manager visit the branches at irregular intervals, and make a thorough examination of the books, and the nature of the collateral held. These men are thoroughly competent, have had years of banking experience, and

are in receipt of large salaries. They are experts who perform their work with a deep sense of the responsibilities involved.

In addition to this, each large branch bank is in daily communication with the head office, either by wire or by letter. Branch banks are obliged to conduct their business in conformity with certain regulations. They must furnish weekly accounts to the head office of all loans and discounts; and at the end of each month a detailed statement of resources and liabilities, together with a description of all collateral security held. The board of directors at the head office is consulted on all important business. Even the general manager is subject to some oversight by a special representative of the directors; he is responsible to them alone; and while he is given certain routine duties to perform, his main business is to keep the directors informed of important developments.

A concrete example of the nature and cost of the work of inspection of a Canadian bank may be seen by examining the methods followed in the Canadian Bank of Commerce in 1912. That institution had 370 branches to be inspected. There were employed, for that purpose, 14 officers of the highest grade, whose salaries amounted to \$46,000. In addition, there were engaged upon the work a large number of ordinary audit officers and assistants at salaries amounting to \$14,800. The services of clerks, messengers, and stenographers cost \$8,000; traveling expenses amounted to \$23,000; and charges for rent, light, stationery, etc., to \$13,000, making a total of \$102,762 for one inspection of this bank. The head office, as well as each branch, was also inspected.

As far as the public is concerned, however, it has no means of judging of the soundness of a bank except by examining the monthly returns which are required by law from each bank. These returns are fairly comprehensive, and have been made more so by the revision of the act this year. The minister of finance may call for supplementary information from any bank, whenever, in his judgment, such data are required to afford a fuller knowledge of a bank's affairs. Of course, these returns can be taken only for what they are worth. In the case of several failed banks the returns were made with every degree of falsification, because no independent checking of the figures was possible.

Since confederation (1867), there have been a number of disastrous bank failures in Canada. The worst failures were those of the Exchange Bank, the Ontario Bank, the Sovereign Bank, and the Farmers' Bank. Canadian bankers have insisted, however, that the collapse of the Ontario Bank and the Sovereign Bank cannot be taken as actual

failures. The Ontario Bank was taken over by the Bank of Montreal and liquidated by that institution. The Sovereign was absorbed by a group of banks which divided its offices among them. The object in each case was chiefly to prevent a general panic. The mere placing of the words "Bank of Montreal" on the banking houses of the defunct Ontario Bank stopped the run which had begun on that institution. The Farmers' Bank, however, was left to its fate. Leading bankers had on more than one occasion opposed the granting of a charter to that bank; and the sudden collapse of its career of high finance occasioned no surprise to the bankers of the country.

Since confederation, eleven banks have failed in Canada; but it must be remembered that not all of these could have been chartered under the present act. The true perspective, moreover, cannot be secured by reference to mere numbers. The proper method is to compare the total assets of the banks that have failed since confederation, with the total assets of the banks as they exist at the present time. This is obviously the correct method to follow; for Canada possesses few banks—only twenty-four in 1913—and therefore a reference to mere numbers gives a grotesque view of the situation. The following figures may prove useful in making the situation clear:

1. Total assets of Canadian banks which have failed since confederation	\$77,780,419
2. Total assets of Canadian banks as on December 31, 1912....	1,526,081,158
3. Total liabilities to the public of Canadian banks as on December 31, 1912	1,292,451,137
4. Total losses by creditors (excluding shareholders) from bank failures since confederation	6,090,357
5. Total losses by creditors through failures of banks which could have been organized under the present bank act	2,176,966

Nevertheless, in obedience to the strong demand for some sort of independent bank examination, provision was made in the recent revision of the act for a shareholders' audit of each bank's affairs. The auditors are to be chosen by the shareholders from a list of 40 names selected by the whole body of the general managers of the banks. The list must be submitted to the minister of finance for his approval. If one third of the shareholders of a bank are dissatisfied with the auditor appointed by the majority, they may appeal to the minister for the appointment of another auditor.

The auditors must examine the books and accounts, cash, securities, documents and vouchers of the head office of the bank. They are empowered, moreover, to require from the directors and officers of the bank such information as may be necessary for the proper perform-

ance of their duties. They are given access to the returns of the branch banks to the head office; and they may, at their discretion, visit any branch or agency for the purpose of examining its books and accounts. The auditors must submit a statement of their findings to the shareholders at the annual meeting, or on any other occasion the necessity may require. In addition the minister of finance may require a special return to be made to him, the cost of the service rendered being paid for by the government.

Canadians would be wise not to expect too much from this system of external examination. After all, it can do no more than verify a bank's statements and books. It cannot guarantee the quality of the assets held, which is the matter of paramount importance; neither can it safeguard loans which are approved of by the directors. In every large undertaking, the soundness of the transaction must depend, as before, upon the judgment of the general manager and the board of directors.

The establishment of central gold reserves is the most important feature added to Canada's banking system by the legislation of 1913. As is well known, the banks under the old act were able to issue notes to the amount of their unimpaired paid-up capital; and from September 1 to the end of the following February—that is, during the period of moving the crops—an additional amount equal to 15 per cent of their combined capital and surplus. Under the new act each bank may issue any amount of notes that it may desire, provided that it deposits with a board of trustees, at Montreal, gold or Dominion notes to the full amount of the notes issued. These notes are to be identical in form with the ordinary notes of the bank. The gold or Dominion notes deposited with the trustees shall be returned to the bank whenever the notes which the bank has outstanding do not amount to the paid-up capital of the bank together with the amount of legal tender money deposited with the trustees. In other words, the banks can still issue their notes up to the full amount of their paid-up capital, and an additional amount from September 1 to the end of the following February, which, as has been explained, may equal 15 per cent of a bank's combined capital and surplus. It is only for notes issued in excess of these amounts that legal tender money must be deposited with the trustees at Montreal. It should be observed, however, that the banks pay a tax of 4 per cent on the extra issue during the crop-moving period, whereas there is no tax upon gold-reserve notes. And as Canadian banks are not required to keep a legal reserve against their demand liabilities, there is no reason why the idle gold in their

reserves should not be sent to Montreal to form the basis of new note issues, especially when it is considered that the gold may be recalled at once when no longer needed to cover notes.

The Canadian Bankers' Association, with the approval of the minister of finance, appoints three members of the board of trustees, and the minister himself a fourth. The association is given power to make by-laws, rules and regulations, respecting the custody and management of the gold reserves.

The value of this new feature of the act will be clearly seen from a consideration of the following facts. According to the quarterly statement of April 30, 1913, the paid-up capital of the Canadian banks was \$115,799,217 and the rest (or surplus) \$108,414,337—a total of \$224,213,554. The emergency circulation, therefore, of the autumn and winter might, had it been necessary, have reached 15 per cent of this sum, about \$33,000,000. In November, 1912, the emergency circulation actually approached \$10,000,000; and the margin available at that time was, therefore, \$20,000,000. Ordinarily that margin would be ample; but circumstances might easily arise where such a margin would be wiped out. In times of stress, a comparatively insignificant action may start a run on a bank. At the end of April, 1913, the deposits payable on demand in Canada were \$365,340,002, and those payable after notice \$631,160,280, a total of \$996,500,282. In November, 1912—a month when the pressure is usually greatest—the deposits were \$16,000,000 higher. To meet a run on such a large amount, a good deal more than \$20,000,000 might be needed. It should here be explained that the deposits payable "after notice" are practically demand deposits in Canada. The new provision does much to economize time, and to bring prompt relief in a dangerous situation. By pooling their gold holdings in a central reserve the banks can immediately receive additional circulation in the form of notes, and still retain control of the gold. The banks can always keep an amount of their own notes on hand to be used for such a purpose. True, the banks can secure Dominion notes in exchange for gold; but it always takes time to get governmental machinery in motion. Moreover, in that case the banks part with their gold; whereas, under the new scheme, the gold is merely concentrated in the reserves at Montreal. But not only for periods of stress, but under normal conditions, will the new provision be valuable. In June, 1912, the circulation of the banks was within \$2,000,000 of the authorized limit; and much anxiety was felt lest that limit be reached. The ability, therefore, to issue notes to any amount required, on a gold basis, will greatly strengthen the position of the banks.

The third important new feature in the revision of the act is the power given to the banks to make loans to farmers on grain which is stored on the farm and still in the farmer's possession. The Canadian banks, in addition to conducting the ordinary business of banking, have been permitted to assume very important functions in aiding the manufacturing and wholesale trade of the country. To such an extent is this true that in many cases they have been "silent partners" in Canadian industry. The permission granted them to loan money to farmers on stored grain in the latter's possession is an attempt to extend to the farmers aid similar to that hitherto granted to manufacturers and wholesalers alone. It should not be thought, however, that the banks have not always granted loans liberally to farmers. While they have refused to make advances of capital to the farmers to be invested in fixed forms (land and buildings), they have always provided money for working capital (machinery, tools, seed, etc.) at reasonable rates on fair security.

The possibility of making advances to the farmers on their grain is expected to be of especial benefit to the West. There, the farmer has been compelled to close his financial year about the first of November. The reason therefor is that the West is a big borrowing country; and to a large extent depends upon the storekeeper and the implement dealer for credit. Dealers in agricultural implements have made farmers' notes fall due about November 1, each year. The result is that the farmer has been obliged to throw his produce on the market in September and October, as soon as the grain is threshed, in order to secure the necessary funds to meet his obligations. This unfortunate state of affairs has helped to create a grain blockade each year. The grain thus thrown on the market in surplus amounts tends to lower prices, to the detriment of the farmer. It is hoped that, under the new legislation, the farmer will be able to hold his grain for higher prices; and in the meantime secure accommodation from the banks to meet his obligations. Many bankers, however, refuse to see any remedy for the situation in the new legislation. They maintain that it will involve too much risk to extend loans on grain over which the farmer continues to assert control. Only the operation of time will enable us to estimate the value of this feature of the act.

There are many other important features of the act which, owing to limits of space, cannot be discussed here, but must be reserved for a future article. The points considered, however, cover the principal new features of Canadian banking.

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The Library of Congress has issued a new *Select List of References on the Monetary Question*, compiled by H. H. B. Meyer and W. A. Slade (Washington, 1913, pp. 247). This, in a measure, takes the place of lists published in 1903 and 1908. The collection of a library for the National Monetary Commission gave opportunity for including many new titles, through the coöperation of Mr. Slade, formerly librarian of the National Monetary Commission. Titles are listed by countries and also under special topics, or crises, guaranty of bank deposits, clearing houses, and foreign exchange. There is also a 13-page author index and an 8-page subject index.

The hearings before the Senate Committee on Banking and Currency have been printed for the use of the committee. Up to October 20, 2,671 pages had been printed.

Among the numerous pamphlets called forth by the introduction of the currency bill are to be noted:

The Federal Reserve Act, containing in parallel columns the text of the act as introduced June 26, 1913, and text as amended and passed by the House, September 18 (Fourth National Bank, New York, pp. 44).

The Administration Currency Bill, by George M. Reynolds, an address before the Minnesota Bankers' Association, July 10, 1913 (Continental and Commercial National Bank, Chicago, pp. 22).

Reviewing Proposed Banking and Currency Bill, by James B. Forgan (First National Bank, Chicago, pp. 18).

A helpful study for students of the cost-of-living problem is *Sugar Prices, from Refiner to Consumer*, by N. C. Adams, published by the federal Bureau of Labor Statistics (Washington, Retail Prices and Cost of Living Series, No. 7, May 14, 1913, pp. 42). The study covers more particularly the years 1901, 1905, and 1910-1912. It is restricted to conditions in New York City, Pittsburgh, and Chicago.

With the *Bulletin of the National Federation of Remedial Loan Associations* for August, 1913, containing the "Proceedings of the Fifth Annual Convention, June 19-21, 1913," there is included a broadside showing the work of remedial loan associations for 1912-13 in statistical form (902 F St., N. W., Washington, D. C.).

On page xxvi of the *Annual Report of the Bank Commissioner of Massachusetts, 1912, Part II, Relating to Coöperative Banks, Savings and Loan Associations, and Credit Unions* (Boston, 1913) it is noted that 26 credit unions have been organized since the last of 1909. The growth is slow, owing largely to lack of information.

In the *Third Biennial Report of the Bank Commissioner of Oklahoma* (Oklahoma City, Dec. 15, 1912), reference is made to the operation of the guaranty law. In the two years covered by the report, emergency assessments were made amounting to $1\frac{3}{4}$ per cent on the average daily deposits of all banks. The experience of each bank which has failed is summarized.

The following reports of proceedings of annual conventions of state bankers' associations for 1912 have been received:

Twentieth Annual Convention of the Alabama Bankers' Association, Mobile, May 17-18, 1912 (McLane Tilton, Jr., secretary, First National Bank, Pell City, pp. 131).

Twenty-second Annual Convention of the Arkansas Bankers' Association, Little Rock, May 28-29, 1912 (Robert E. Wait, secretary, Little Rock, pp. 198).

Eighteenth Annual Convention of the California Bankers' Association, Long Beach, May 23-25, 1912 (Frederick H. Colburn, secretary, Savings Union Bank Bldg., San Francisco, pp. 56).

Thirteenth Annual Meeting of the Connecticut Bankers' Association, New London, June 18-19, 1912 (Charles E. Hoyt, secretary, South Norwalk, pp. 16).

Nineteenth Annual Session of the Florida Bankers' Association, Key West, April 4-5, 1912 (George R. DeSaussure, secretary, Jacksonville, pp. 58).

Twenty-first Annual Convention of the Georgia Bankers' Association, Atlantic Beach, Fla., May 24-25, 1912 (Haynes McFadden, secretary, Atlanta, pp. 156).

Eighth Annual Convention of the Idaho Bankers' Association, Coeur d'Alene, June 17-19, 1912 (E. H. Plowhead, secretary, Caldwell Commercial Bank, Caldwell, pp. 119).

Twenty-sixth Annual Convention of the Iowa Bankers' Association, Cedar Rapids, June 5-6, 1912 (Percy W. Hall, secretary, Des Moines, pp. 216).

Twenty-fifth Annual Convention of the Kansas Bankers' Association, Topeka, May 23-24, 1912 (W. W. Bowman, secretary, Topeka, pp. 209).

Convention Proceedings of the Louisiana Bankers' Association, Covington, April 26-27, 1912 (L. O. Broussard, secretary, Abbeville, pp. 96).

Twenty-third Annual Convention of the Minnesota Bankers' Association, St. Paul, June 14-15, 1912 (Charles R. Frost, secretary, Minneapolis, pp. 199).

Ninth Annual Convention of the New Jersey Bankers' Association, Atlantic City, May 3-4, 1912 (William J. Field, secretary, Commercial Trust Co., Jersey City, pp. 152).

Nineteenth Annual Convention of the New York State Bankers' Association, Buffalo, June 13-14, 1912 (William J. Henry, secretary, 11 Pine St., New York, pp. 262).

Tenth Annual Convention of the North Dakota Bankers' Association, Jamestown, June 19-20, 1912 (W. C. McFadden, secretary, Commercial Bank, Fargo, pp. 303).

Twenty-second Annual Convention of the Ohio Bankers' Association, Cedar Point, July 2-3, 1912 (S. B. Rankin, secretary, 805 Wyandotte Bldg., Columbus, pp. 202).

Eighteenth Annual Convention of the Pennsylvania Bankers' Association, Bedford Springs, June 18-19, 1912 (D. S. Kloss, secretary, First National Bank, Tyrone, pp. 214).

Twenty-first Annual Convention of the South Dakota Bankers' Association, Belle Fourche, June 26-27, 1912 (J. E. Platt, secretary, Security Bank, Clark, pp. 160).

Twenty-eighth Annual Convention of the Texas Bankers' Association, San Antonio, May 7-9, 1912 (J. W. Hoopes, secretary, Austin National Bank, Austin, pp. 131).

Third Annual Convention of the Vermont State Bankers' Association, Montpelier, Feb. 22, 1912 (C. S. Webster, secretary, Barton, pp. 60).

Nineteenth Annual Convention of the Virginia Bankers' Association, Old Point Comfort, June 20-22, 1912 (Walker Scott, secretary, Farmville, pp. 240).

Eighteenth Annual Convention of the Wisconsin Bankers' Association, Milwaukee, July 24-25, 1912 (George D. Bartlett, secretary, Milwaukee, pp. 278).

Public Finance

In *General Statistics of Cities: 1909*, to be distinguished from the annual series on *Financial Statistics of Cities*, published by the Bureau of the Census (Washington, 1913, pp. 197), data are given in regard to sewers, refuse disposal, street cleaning, and highways. A table on page 190 shows wages of city employees by specified classes. Of special service is the paragraph on page 15, indexing the years in which various branches of municipal service have been reported in this series of reports.

Relating to the income tax provision of the new tariff is *The Income*

Tax: Opinions of J. K. Shields, C. Hull, and T. M. Gordon (Sen. Doc. No. 171, 63 Cong., 1 Sess., Aug. 26, 1913, pp. 20).

Additional public documents relating to the recent tariff legislation are:

Report to Accompany H. R. 3321. A bill to reduce tariff duties, to provide revenue for the government and for other purposes, together with views of minority and statistical data (Washington, H. R. No. 5, 63 Cong., 1 Sess., 1913, pp. 814).

Tariff Handbook. Report on H. R. 3321, together with a comparative presentation of the text of the law of 1909, and H. R. 3321 as it passed the House and as the same was reported to the Senate. This contains statistical comparisons of imports, exports, rates of duties, and revenues for 1896, 1905, 1910 and 1912. It was prepared for the use of the Committee on Finance (Washington, 1913, pp. 484).

Tariff Schedules, Briefs and Statements Filed with the Committee on Finance, United States Senate, 63 Cong., 1 Sess., on H. R. 3321 (Washington, 1913, 3 vols., pp. 2309). Volume 1 deals with schedules A to H; volume 2 with schedules I to L, and volume 3 with schedules M and N, free list, customs administration and income tax. The last volume also contains a subject index. Briefs printed in the hearings before the House Committee on Ways and Means are not duplicated in this collection.

Tariff Schedules. Hearings before Sub-committee of the Committee on Finance (Washington, 1913, pp. 824).

Notes on Tariff Revision, 1913. An Analysis of the Tariff Bill as Passed by the House of Representatives, and as amended and reported to the Senate by the Senate Committee on Finance, with particular reference to the meaning and effect of the changes in phraseology and the new provisions introduced therein (Washington, 63 Cong., 1 Sess., Sen. Doc. No. 136, July 23, 1913, pp. 262).

Conference Report on H. 3321, to Reduce Tariff Duties and to Provide Revenue for Government (H. Rep. No. 86, Sept. 29, 1913, pp. 39).

Sugar at a Second Glance. An article on the influences of our high tariff on sugar, upon the ultimate price to consumers, and as affecting the high cost of living, By Frank C. Lowry (Sen. Doc. No. 23, 63 Cong., 1 Sess., May 6, 1913, pp. 106). In this, Mr. Lowry, secretary of a committee of wholesale grocers, makes a reply to *Sugar at a Glance*, by Truman G. Palmer, previously published as a Senate document.

Under date of April 7, 1913, the Tax Commission of Massachusetts issued a brief pamphlet in reference to a certain legislative inquiry

in regard to the amount of untaxed intangible property within the state and what steps could be taken to secure its taxation (H. Doc. 2290, pp. 9). From the returns made for the taxation of legacies and successions, it is estimated that the amount of personal property is $3\frac{1}{2}$ times the amount of real estate. This would give \$11,358,000,000 as the true valuation of all the personal property in the state. Allowing for one half as exempt under the law, it is contended that there is \$4,646,000,000 of intangible personalty which is not disclosed.

The Bureau of Statistics of Massachusetts has published as "Municipal Bulletin" No. 5, *Laws Relating to Municipal Finance* (July, 1913, pp. 44). Of importance is the new law relating to the borrowing of money.

In the *Fifth Annual Report on the Statistics of Municipal Finance of Massachusetts for 1910* (Boston, State House, Bureau of Statistics, 1913, pp. xxx, 263), Mr. Gettemy notes the steady progress in accounting reform.

The *Annual Report of the School Committee of Newton, Mass.*, for 1912, contains a report of Mr. F. E. Spaulding, superintendent of schools, in which an exhaustive analysis is made of the cost of public schools by different grades, with comparisons with other cities and towns in Massachusetts (pp. 151).

Mr. C. B. Fillebrown (77 Summer St., Boston) has for distribution *Thirty Years of Henry George* (pp. 15) in which the progress of taxation of land and the unearned increment is briefly summarized; and also *A 1914 Single Tax Catechism*, a twelfth revision (pp. 16).

The New York Tax Reform Association has issued *Tax Legislation of New York, 1913* (pp. 4), and *Tax Legislation and Pending Constitutional Amendments, 1913* (pp. 7). The latter is a summary of legislation in different states. (Bulletins Nos. 546 and 547, 29 Broadway, New York.)

Reprints have also been made by the same association of *Abolition of Personal Taxation*, an address presented to the First New York State Conference on Taxation in 1911, by Lawson Purdy; and of *Interstate Comity and Double Taxation*, an address before the Second Conference on Taxation in 1912, by David Rumsey.

Mayor Blankenburg of Philadelphia has published a pamphlet on *Real Estate and Its Taxation in Philadelphia*, prepared by Robert D. Dripps and Arthur E. Post. Proposals are made in regard to improvement in assessment of realty which is regarded as the "most depend-

able subject for permanent taxation." (Philadelphia, May 1, 1913, pp. 56.)

From the office of the attorney general of Minnesota has appeared an annotated reprint of the *Inheritance Tax Law of Minnesota* (Minneapolis, 1913, pp. 25). This contains brief historical notes.

The issue of August 29, 1913, of the "I. B. A. of A. Bulletin" (111 West Monroe St., Chicago, pp. 40) contains a report on the constitutionality of exempting securities from taxation or taxing them at a lower rate than tangible property in the various states. The report was prepared by W. H. Lyon, assistant counsel of the Investment Bankers Association of America. The laws of each state are briefly summarized.

Demography

A bulletin on *The Immigrant Population of Massachusetts*, part I of the *Annual Report on the Statistics of Labor for 1912 of the Massachusetts Bureau of Statistics* (Boston, April 30, 1913, pp. 90), consists of a re-publication of data relating to Massachusetts contained in three different federal sources, viz., the last annual report of the Commissioner General of Immigration, the 1910 census, and the report of the United States Immigration Commission. Of these, the latter supplies over two thirds of the matter of the bulletin.

The general results are not surprising, the facts being pretty well known. Massachusetts receives about 8 in 100 of the immigrant aliens; of the older groups of immigrants a larger proportion; of the newer groups a less proportion; those of Slavonic and Iberic origin making 68 per cent of total admissions, but only 40 per cent of Massachusetts admissions. South Italians, Poles, and Irish make up her largest quota, and of Portuguese she receives 52.8 per cent of all those arriving.

The census figures for birth and parentage are given for Massachusetts as a whole, in summary shape for all cities of 10,000, and more fully for Boston, Cambridge, Fall River, Lowell, and Worcester (not, however, by wards, though these figures are now available). The largest foreign-born groups in the state are the natives of Ireland, Canada (of whom the French element is less than half), and Russia. Until, however, the census figures of mother tongue are published there is no way of disentangling the latter most heterogeneous group of Jews, Poles, Finns, Lithuanians, Germans, Ruthenians, Russians, and others, though the immigration data show the proportions in which they are represented year by year among arrivals.

It is desirable that the federal immigration authorities should furnish the numbers not only of those destined to the state in general but of those destined to Boston and other chief cities. These data are extant, and if considered too detailed for federal publication they might well be furnished to the State Bureau of Statistics.

The figures of the Immigration Commission are, unfortunately, open to considerable criticism. In some cases conclusions are based on too few data, as, for instance, data (p. 33) as to naturalization among Poles (29 individuals investigated). Still worse, it is not always possible to judge, at any rate by immediate inspection, on what numerical basis a statement rests. Again, data drawn from selected cases are liable to represent not racial contrasts but to reflect the line of choice. In other cases a mountain of statistics produces a *ridiculus mus* of results; for instance, proof that immigrants under fourteen on arrival are more apt to know English than those older on arrival, and that those who have been longer in the country speak English more generally than those more recently come.

Perhaps the most surprising figures are those as to "charity seekers." Of over 1,000 new "charity organization cases" in Boston only 240 were foreign-born of the non-English-speaking groups (English-speaking foreign-born 380), while of the second generation (native born of foreign father) there were only 48 in all (as against 342 of the much smaller total of the native born of native father.) E. G. BALCH.

The Children's Bureau of the United States Department of Labor has issued a pamphlet on *Baby Saving Campaign*, representing a preliminary report on what American cities are doing to prevent infant mortality (Washington, Infant Mortality Series, No. 1, 1913, pp. 93).

This bureau has also made a convenient *Handbook of Federal Statistics of Children, Part 1*, which contains tables showing the number of children, with their sex, age, race, nativity, parentage, and geographic distribution (Washington, Bureau Pub., No. 5, 1913, pp. 99).

In the *Second Annual Report of the Bureau of Industries and Immigration of New York, for 1912*, of which Miss Frances A. Kellor is the directing head (95 Madison Avenue, New York, pp. 29), note is made of the widening interest in organized effort to deal with the needs of alien residents. Other states are following the lead of New York in establishing state immigration commissions.

The agitation for improved vital statistics is well illustrated in the pamphlet *The Registration of Vital Statistics a Good Business*, an address delivered before the Annual Conference of Health Officers of

Indiana May 13, 1913, by Lewis I. Dublin, Statistician of the Mutual Life Insurance Company of New York (pp. 16).

The Thirty-Third Annual Report of the Associated Charities of Boston for 1912 contains a brief study of the Slavs in South Boston (pp. 25-28).

The "Volta Review" has recently issued a four-page leaflet descriptive of a forthcoming publication on graphical studies of marriages of the deaf (35th St. and Volta Place, Washington).

Bulletin XV of the *Fifth Census* of Canada concerns the *Educational Status of the People* (Ottawa, June 10, 1913, pp. 8).

Bulletin XVII (Sept. 17, 1913, pp. 7) deals with *Infirmities*, giving statistics of the defective classes including those of "unsound mind."

The appendix to bulletin 18 (June, 1913), of the "Monthly Summary of Australian Statistics" is devoted to *Statistics of Small-pox and Vaccination in Australia and Other Countries* (Commonwealth Bureau of Census and Statistics, Melbourne, Aug. 14, 1913, pp. 13). There are statistics for the United Kingdom, continental countries, Japan as far back as 1881, and for the United States since 1899. There is a brief bibliography.

Insurance and Pensions

MISSOURI ORR LAW AGAINST COMBINATIONS OF INSURANCE COMPANIES. In the early months of this year the legislature of the state of Missouri enacted an anti-trust law known as the Orr law, at the same time repealing the Oliver law of 1911, under which the fire insurance companies of the state had been operating. One section of the Orr law read as follows:

In any proceeding against or prosecution of any insurance company under the provisions of this article, it shall be *prima facie* evidence that such company is a member of a pool, trust, agreement, confederation or understanding to control, affect, or fix the price or premium to be paid for insuring property against loss . . . if it be shown that such company or any agent or representative thereof in writing insurance has used any insurance rate, . . . prepared, published, kept or furnished by any person, association of persons or bureau employed by, representing or acting on behalf of any other insurance company or association in and about the making and publishing of insurance rates for use in any portion of this state.¹

In the middle of April, representatives of leading fire insurance companies met in Philadelphia and voted to cease operations in Missouri after April 30. The Western Union, though in session in Philadelphia at the same time, took no action, fearing to violate the anti-trust

¹ House bill No. 477, Sec. 10,313 A; approved March 29, 1913.

law.² Shortly after, in the same month, representatives of those companies not participating in the Philadelphia conference met in Pittsburgh and likewise decided that the companies could not safely transact business in Missouri while the Orr law was in force.³

Close upon the heels of this decision to suspend business, Superintendent of Insurance Revelle announced that he would revoke the license of any company taking such action. He stated that a company could not suspend and that the only course open was to withdraw from the state, in which case he would revoke the licenses. In reply, the companies announced that if this were done, they would cancel all insurance in force in the state. Obviously, if the insurance superintendent revoked the licenses held by the various companies, the latter would have no power to do business in the state. It is difficult, therefore, to see how the companies could legally act in any other way, assuming that the insurance superintendent carried out his announced intention. At any rate, the threat caused the attorney general to take action, and he instituted two proceedings before the supreme court of the state in the nature of *quo warranto*. Both charged conspiracy to cease selling fire insurance in the state. One of the proceedings in addition merely asked that an injunction issue to prevent the cancellation of policies already in force.⁴ The second proceeding asked also for an injunction to prevent the companies from refusing to do a general fire insurance business and from refusing to write and sell insurance.⁵

On Monday, April 28, the court in the latter case granted a temporary injunction, but only upon the point of cancelling the insurance in force.⁶ On April 30 the companies suspended and in June Super-

² The resolutions of the Philadelphia meeting were as follows: "We, therefore, *each for ourselves*, have decided that we will on the 30th day of April, 1913, cease to directly or indirectly grant insurance on property in the state of Missouri until some safe and practical method for doing business in that state shall have been devised." Italics are the writer's.

³ *Spectator*, May 1, 1913, p. 210.

⁴ *State of Missouri ex. rel. John T. Barker, Attorney General v. Amazon Fire Insurance Company and 105 others*.

⁵ *State of Missouri ex. rel. John T. Barker, Attorney General v. Assurance Company of America and 181 others*.

⁶ One should note in fairness to the companies that the resolutions of the Philadelphia meeting cited in the footnote above were merely a decision to cease the writing of new business, after April 30. So far as the cancellation of the insurance in force was concerned, the companies seemed to have felt that this was the only result that could logically follow a revocation of licenses. Apparently, from the first they had no desire to cancel existing insurance.

intendent Revelle cited all of them to show cause on July 1 why their licenses should not be revoked.⁷ Before that date, however, the supreme court handed down a decision (June 28) holding that the fire insurance companies must answer the charge of conspiracy. The court also issued a temporary injunction, practically identical with that issued in April, against their cancelling insurance contracts already in force. Attorney General Barker then began preparations for a hearing on the conspiracy cases which were scheduled to begin August 1, but on August 12 the companies resumed business in the state and the difficulty was over.

To understand the nature of this controversy it is necessary to go back to the Oliver law of 1911. In essence, this law was a state rating law. Every insurance company was required to file with the insurance superintendent general basis schedules giving the charges, credits, terms, privileges, and conditions in any way affecting the rates. After the filing of these basis schedules, the company was further required to file rates for each risk or class of risks as derived from the basis schedules. The superintendent of insurance was empowered to investigate whether the rates were unreasonable or discriminatory, and if found so to be he was authorized to determine what schedule of rates would be reasonable and just, and to direct the companies to file new rates not in excess of those found reasonable by him.⁸

Under the provisions of this bill a considerable reduction in rates and hence in premium income seems to have taken place.⁹ Now since 1909 the loss ratio in Missouri has been the following:

1909.....	59.3 per cent
1910.....	60.0 " "
1911.....	76.5 " "
1912.....	72.5 " "

For the exceptionally heavy losses of the last two years, rightly or wrongly, the Oliver law was blamed.¹⁰ A synopsis of the underwriting operations of sixty-five millionaire fire insurance companies for the ten-year period ending in 1912, showed an expense ratio of 36.66 per cent.¹¹ Applying this ratio to the loss ratio mentioned above, it becomes evident that the companies in the state of Missouri were doing business either at a loss or upon a very narrow margin of profit during 1911 and 1912.

The Oliver law also had the following provision: "Any one or more

⁷ *Spectator*, June 19, 1913, p. 271.

⁸ *Laws of Missouri 1911*, S. B. 25, pp. 268, 270.

⁹ *Spectator*, November 23, 1911, p. 246; December 14, 1911, p. 288.

¹⁰ *Ibid.*, April 17, 1913, p. 185.

¹¹ *Ibid.*, April 10, 1913, p. 174.

of such companies, singly or jointly, may employ for the making of such general basis schedules and rates and the filing of the same the services of such experts as it, or they, may deem advisable for such purpose."¹² The repeal of the Oliver law and the enactment of the *prima facie* section of the anti-trust law quoted above thus withdrew from the companies this privilege of making rates in common. Already the business in Missouri was a practically profitless one and the insurance companies were scarcely to be blamed for not caring to undergo the risk and expense of suits in court under the act. Moreover, if compelled to make rates separately, the result could scarcely be anything else than an enormous increase in expenses.

In defense of the new section of the anti-trust act, Attorney General Barker wrote the superintendent of the insurance department as follows, replying to five questions submitted by the American Central Insurance Company:

It is the opinion of this department that the mere fact that insurance companies in this state use the same rate book or write insurance at the same rate is not of itself a violation of the law, but before these companies are guilty of a violation of the law it must appear that they have entered into an agreement or conspiracy to charge the same rate.

... *prima facie* evidence is only evidence on first appearance, and is not sufficient to warrant a conviction, and the only way these companies can violate the law is by conspiring together to charge the same rate and in the absence of such a conspiracy or illegal agreement they do not violate the law by writing at the same rate.¹³

The *Spectator* pointed out, however, that the leniency thus hinted by the attorney general had no weight, as 115 county attorneys might start suits without regard to the attorney general.¹⁴

The results of the withdrawal of the companies were serious. The Missouri Bureau of Fire Prevention composed of about 400 state and special agents first suspended business.¹⁵ In July the St. Joseph bureau suspended and the St. Louis bureau was about to suspend. Credit and building operations throughout the state were seriously hampered and the governor was urged to call a special session of the legislature to repeal the obnoxious law. While affairs were apparently deadlocked, President Henry Evans of the Continental and Fidelity-Phoenix Company opened the negotiations which resulted in the final settlement, by sending Vice-President Rumsey of the same company to

¹² *Laws of Missouri, 1911, S. B. 25, p. 269.*

¹³ Carbon copy of the opinion of Attorney General Barker, dated April 16, 1913, and addressed to Superintendent Revelle.

¹⁴ *Spectator*, April 24, 1913, p. 197.

¹⁵ *Ibid.*, August 21, 1913, p. 78.

Missouri where the first conference was held.¹⁶ The upshot of the matter was that the attorney general in a written opinion stated that he believed the objectionable section of the law to be unconstitutional and agreed to dismiss the conspiracy writs pending; also to intervene and dismiss any proceedings which might be instituted independently by the 115 county attorneys referred to above. In addition, Governor Major agreed to appoint promptly a commission to report on the fire insurance situation.¹⁷

It is to be hoped that this little experience will prove a sound and salutary lesson to the state of Missouri. The wisdom of anti-compact laws has always been open to question. In 1911, a New York committee reported as follows:

As to the so-called anti-compact law: for the many reasons given, your committee believes that it would be most unfortunate for the public if a condition of open competition in rates were forced by the state. The safe policy to follow . . . is to recognize the good which flows from combinations well regulated; to permit the companies to use rating associations and bureaus to develop the principle of schedule rating and to spread the cost of determining proper rates among the companies, and to permit them to agree to maintain those rates.¹⁸

To the same effect is the report of an Illinois committee of the same year which condemns in no uncertain language the attitude of legislators opposed to the work of rating organizations and a common system of measuring risks.¹⁹

No one denies the wisdom of carefully regulating fire insurance companies, but there is probably no single field in which the principle of competition is less sound. The Oliver law represented an attempt by the state of Missouri to regulate the rates charged by the fire insurance companies. The repeal of that law and the enactment of the *prima facie* section of the Orr law was an attempt to force open competition in rates for fire insurance. In both cases the state's attitude seems to have been dictated by the desire to secure low rates. The wisdom of the first law, it is not for the writer to discuss here, but the second law as applied to fire insurance companies deserves unhesitating condemnation. However desirable low rates may be in them-

¹⁶ *Spectator*, August 14, 1913, p. 63.

¹⁷ *Indicator*, August 20, 1913, p. 323; and *Spectator*, August 14, 1913, pp. 63-64.

¹⁸ Report of the Joint Committee of the Senate and Assembly of New York, appointed to investigate corrupt practices in connection with . . . the affairs of insurance companies other than life, pp. 124-125.

¹⁹ "Report of the Illinois Fire Insurance Commission," *Illinois Insurance Report*, 1911, part I, pp. 920-923.

selves, yet if the only way in which to secure them is by open competition with its rank injustice to small insurers, then low rates must be discarded. The action of the companies, however much it may have been dictated by purely selfish motives, was none the less in defense of the small insurer and of equality in the distribution of the fire hazard. As such it deserves hearty commendation.

The appointment of a committee to examine into the fire insurance situation will be a step in the right direction. It is probably safe to predict that the report of such a committee will be to the same effect as the New York and Illinois reports above referred to, in which case a closer approach to justice for all concerned may be expected in future Missouri fire insurance legislation.

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The address of W. T. Emmet, superintendent of insurance of New York, delivered before the National Association of Local Fire Insurance Agents, October 15, 1913, on *What Should be the Attitude of the State toward the Business of Fire Insurance?* has been issued as a reprint (Albany, pp. 14). Mr. Emmet suggests the possible need of state supervision of rates in so far as is necessary for the maintenance of reserves in order to secure solvency.

Other pamphlets on insurance to be noted are *Report of the Special Committee on the Insurance Rating Law*, of Missouri (Jefferson City, 1913, pp. 13); and *Report on Examination of the Workmen's Compensation Service Bureau*, New York, made by the Insurance Department, New York (Albany, July 30, 1913, pp. 42); *The Workmen's Compensation Situation in New York State*, an address delivered by William T. Emmet at the National Convention of Insurance Commissioners, August 1, 1913 (Albany, pp. 11).

The Department of Social Economics of the London Municipal Society has issued a pamphlet on *The National Insurance Act. First Annual Report* (83 Tothill St., Westminster, London, S. W., July, 1913, pp. 15).

PERIODICALS

The REVIEW is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

Theory

(Abstracts by W. M. Adriance)

ALLIX, E. *L'oeuvre économique de Germain Garnier traducteur d'Adam Smith et disciple de Cantillon*. Rev. d'Hist. Doc. Econ., No. 4, 1912. Pp. 26.

One of the author's careful studies of the development of economic thought and its relation to political and social life.

BODIN, C. *La valeur d'après les économistes anglais*. Rev. d'Econ. Polit., July-Aug., 1913.

A review of Turgeon's book on the history of value theory in England.

BOEHM-BAWERK, E. and SCHUMPETER, J. *Eine "dynamische" Theorie des Kapitalzinses*. Zeitschr. f. Volkswirtsch., Nos. 1, 4, 5, 1913. Pp. 62, 41, 17.

An extended and strongly adverse review of Schumpeter's interest theory, written in Böhm-Bawerk's most brilliant critical style; the reply by Schumpeter, and Böhm-Bawerk's "concluding remarks."

BROCK, F. H. *Nagot om monopolvinster och dess beskattning samt om gross- och detalj-handelspris*. Ek. Tids., No. 1, 1913. Pp. 4.

An answer to Professor Wicksell as to monopoly profits and the relation of wholesale to retail prices.

BROWN, H. G. *The marginal productivity versus the impatience theory of interest*. Quart. Journ. Econ., Aug., 1913. Pp. 20.

Noteworthy in that the author, a disciple and colleague of Fisher, now goes over to the ranks of the productivity theorists.

CHATELAIN, E. *Le problème de la variation du revenu total croissant entre le capital et le travail*. Rev. Econ. Int., Nov. 15-20, 1912. Pp. 8.

Continues a discussion with M. Yves Guyot as to whether Bastiat or Rodbertus more correctly formulated the laws governing the relative distributive shares going to capital and labor respectively.

CLEMENT, H. *La doctrine de Saint-Simon*. Réf. Soc., Apr., 1913.

An anti-socialistic review.

CONRAD, O. and OSWALD, H. *Das Prinzip von Leistung und Gegenleistung als theoretisches Problem*. Zeitschr. f. Sozialwis., No. 10, 1912.

COOLEY, C. H. *The institutional character of pecuniary valuation*. Am. Journ. Sociol., Jan., 1913. Pp. 13.

An indictment of economists, who, in their theories of value, are accused of overlooking some of the most essential conditioning factors, viz., social and institutional influences. An important article.

CUNNINGHAM, W. *The economic basis of universal peace*. Econ. Rev., Jan., 1913. Pp. 7.

D'EICHTAL, E. *L'économiste Frédéric List, candidat à l'un des concours de l'Académie des sciences morales et politiques en 1837*. Rev. Bleue, Mar. 29, 1913. Pp. 7.

An account of the essay on protection submitted by List in 1837 in competition for the prize offered by the Académie des Sciences at Paris.

ENGLAND, M. T. *Economic crises*. Journ. Pol. Econ., Apr., 1913. Pp. 10.

Completes former studies of economic crises by giving in outline the author's theory of crises.

FANNO, M. *Le teoria del mercato monetario*. Giorn. d. Econ., Mar., 1913. Pp. 25.

The interest theories of various economists, European and American, are the basis of this study of the theory of the money market.

FEILBOGEN. *L'école autrichienne d'économie politique*. Journ. des. Econ., Apr., 1913. Pp. 8.

A continuation. Gives an account of the work of Schumpeter.

FEUCHTMANGER, L. *Die ethischen Grundlagen der Nationalökonomie im Lichte der neuen "Tätigkeitsphilosophie"*. Schmollers Jahrb., No. 2, 1913.

FRIBOURG, A. *La repopulation et Colbert*. Grande Rev., Mar., 1913. Pp. 11.

An account of Colbert's views on population, and his efforts to build up population in Canada.

GIDE, C. H. *Smart's "Theory of Value"*. Rev. d'Econ. Polit., July-Aug., 1913.

A review of the new edition of Smart's well-known work.

GUYOT, Y. *Définition, caractère et indices des crises*. Journ. des Econ., Aug., 1913. Pp. 26.

HANEY, L. H. *Der Einfluss des Sozialismus auf die Volkswirtschaftslehre*. Archiv f. Geschichte Sozial., No. 2, 1913. Pp. 16.

In a brief historical review Professor Haney shows the stimulus which economic theory has received from socialistic criticism.

HERKNER, H. *Der Kampf um das sittliche Werturteil in der Nationalökonomie*. Jahrb. f. Gesetz. Verw. u. Volksw., No. 2, 1913.

HEYN, O. *Zur Frage der Eliminierung des Wertproblems aus der Geldtheorie*. Zeitschr. f. Sozialwis., No. 1, 1913.

DE JOHANNIS, A. J. *Il capitale disponibile*. Rif. Soc., Apr., 1913. Pp. 15.

Restriction of the term to new values created by production.

KOEFØED, M. *Emil Meyer*. Nat. øk. Tids., Jan.-Feb., 1913. Pp. 10.

An appreciation of Emil Meyer, a Danish economist, who died Jan. 2, 1913.

LEVY, R. G. *L'économie politique aux Etats-Unis*. Rev. Intern. du Com., June, 1913. Pp. 38.

A detailed review and summary of Taussig's *Principles of Economics*.

LIEFMANN, R. *Theorie des Sparens und der Kapitalbildung*. Schmollers Jahrb., No. 4, 1912.

LOBIA, A. *Quelques remarques sur la rente du sol urbain*. Rev. d'Econ. Polit., Mar.-Apr., 1913. Pp. 15.

A discussion of the nature of ground rent.

MC CREA, R. C. *Schumpeter's economic system*. Quart. Journ. Econ., May, 1913.

Schumpeter's work on pure theory has now been followed by a theory of dynamic economics. (*Theorie der Wirtschaftlichen Entwicklung*.) Both books are here very thoughtfully reviewed.

MURRAY, R. A. *Sui presupposti logici della scienza economica*. Riv. Ital. di Sociologia, May-Aug., 1913. Pp. 8.

DI NOLA, C. *Gli odierni aspetti dell' economia agraria*. Giorn. d. Econ., Apr., 1913. Pp. 35.

Considers chiefly the factors that enter into the determination of rent.

OBERFOHREN, E. *Jean Bodin und seine Schule*. Weltwirtsch. Archiv, Apr. 1913. Pp. 35.

Formulates a system of economics from the views of Bodin and his followers.

OLDENBURG, K. *Gerechtigkeit und Kommunismus in der heutigen Volkswirtschaft*. Jahrb. f. Gesetz. Verw. u. Volksw., No. 3, 1912.

OSWALT, H. *Der Ertragsgedanke*. Zeitschr. f. Socialwis., May, June, 1913.

PERSONS, C. E. *Marginal utility and marginal disutility as ultimate standards of value*. Quart. Journ. Econ., Aug., 1913. Pp. 30.

Sees in the inequality of distribution a dominant factor in the determination of value.

PICARD, R. *Les mutations des monnaies et la doctrine économique en France, du XIV^e siècle à la Révolution*. Rev. d'Hist. Doc. Econ., No. 4, 1912. Pp. 25.

An outline history of French currency and of the ideas on money expressed by writers in the course of the period under review.

RICCI, U. *Che cosa è il reddito*. Giorn. d. Econ., Aug., 1913. Pp. 35.

An attempt to give, for both static and progressive societies, a definition of income which should at least have the virtue of precision.

RIST, C. *Böhm-Bawerk's positive theorie des kapitals*. Rev. d'Econ. Polit., May-June, 1913. Pp. 3.

A review of the new (third) edition.

ROBINSON, L. N. *The seminar in the college*. Journ. Pol. Econ., July, 1913. Pp. 4.

Joins issue with the view of Professor Seligman (cf. J. P. E., Feb., 1912) that the seminar method is for the university, not for the college.

ROGERS, A. K. *Burke's social philosophy*. Am. Journ. Sociol., July, 1912. Pp. 26.

Burke's philosophy is tested by the standards of modern sociology, and found wanting.

SCHALLMAYER, W. *Höherentwicklung und Menschenökonomie*. II. Zeitschr. f. Socialwis., Apr., 1913.

SERGI, G. *Qualche idea sul progresso umano*. Riv. Ital. di Sociologia, Jan-Feb., 1913. Pp. 8.

Human progress is of various kinds, which do not necessarily move together.

TUGAN-BARANOWSKY, M. *Soziale Theorie der Verteilung*. Ann. f. Soz. Pol. u. Gesetz., II, 5-6, 1913.

WALTHER, A. *Geldwert in der Geschichte. Ein methodologischer Versuch*. Viert. Schr. f. Sozial u. Wirts. Gesch., X, 1, 2, 1912. Pp. 51.

WOLFE, A. B. "Sourcebooks" in elementary economics. Journ. Pol. Econ., May, 1913. Pp. 6.

Includes a review of Professor Fetter's *Source Book in Economics*.

YOUNG, A. A. Pigou's "Wealth and Welfare." Quart. Journ. Econ., Aug., 1913. Pp. 14.

A thoughtful review of Pigou's recent book.

Economic History, Foreign

(Abstracts by Clive Day)

ASHLEY, W. J. *Comparative economic history and the English landlord*. Econ. Journ., June, 1913. Pp. 17.

An interesting comparison of the course of development of landed property in modern and recent times, in which the author answers as follows: "the question why the English land system differs from the systems of France or Germany. England owes its present land system, with all its merits and demerits, to the operation on the upper classes of the ordinary motives of self-interest. These classes were enlarged and strengthened by the growth of trade; and they were set free to carry out their will—and this, after all, was the main thing—by the triumph of the Reformation and the victory of Parliament."

BACHI, R. *L'Italia economica nel 1912*. Rif. Soc. (supplement), June, July, 1913. Pp. 235.

Similar in plan and character to the yearbook for 1911, reviewed in the REVIEW for December, 1912, page 888.

BRUNO, A. *Intorno alle origini della famiglia*. Riv. Ital. di Sociologia, May-Aug., 1913. Pp. 18.

Not by considerations pertaining to primitive sexual morality, but by comparative studies of primitive social organization, are the theories of Bachofen, Morgan, Lubbock, Ferguson and McLennan to be proved erroneous.

DEPITRE, E. *Le système et la querelle de la "Noblesse commerçante" (1756-1759)*. Rev. d'Hist. Doc. Econ., No. 2, 1913. Pp. 137-176.

An analysis of the Abbé Coyer's work and of the polemic to which it gave rise: a contribution to the history of economic doctrine based on an extensive knowledge of the literature of the period.

DONALD, W. J. A. *Factors in Canadian industrial development*. Queen's Quart., Apr.-May-June, 1913. Pp. 12.

A sketch covering the economic history of Canada from the period of French rule to the present.

DURAND, R. *La taille dans les généralités du secrétariat d'état de la maison du roi sous Louis XIV (1638-1709)*. Rev. d'Hist. Doc. Econ., No. 2, 1913. Pp. 20.

Statistics from the national archives, showing year by year, with some gaps, the amount of *taille* attributed to each election in a considerable part of France. The figures make prominent the importance of Paris and its subordinate districts as a source of revenue.

ECKEL, E. C. *The growth of modern industrialism*. Engg. Mag., June, 1913. Pp. 13.

Popular.

GUYOT, Y. *La situation économique des pays bas*. Journ. des Econ., Sept., 1913. Pp. 26.

Statistical survey.

JOSEPH, L. *Economic development of Germany in the nineteenth century, with special regard to the period from 1871*. Scottish Bankers' Mag., July, 1913. Pp. 15.

A statistical survey.

LAUREYS, H. *Nos industries manufacturières*. Rev. Econ. Canadienne, Apr., 1913. Pp. 15.

Analysis of the figures in the fifth Canadian census (1910); two charts, showing development by province and by industry since 1900.

LEFORT, J. *Les banquiers à Rome*. Rev. Gen. du Droit, Jan.-Feb., 1913. Pp. 7.

LETACONNOUX. *Le comité des députés extraordinaire des manufactures et du commerce de la France et l'oeuvre économique de l'Assemblée constituante*. Ann. Révolut., Mar.-Apr., 1913.

LHERITIER, M. *Histoire des rapports de la chambre de commerce de Bordeaux avec les intendants, le Parlement et les jurats, de 1705 à 1791*. Rev. d'Hist. Bordeaux, Nov.-Dec., 1912. Jan.-Feb., 1913.

MARTIN SAINT-LEON, E. *Les anciennes corporations de métiers et la lutte contre la fraude dans le commerce et l'industrie*. Réf. Soc., May 16, 1913. Pp. 10.

MAZZEI, I. *Federico Ozanam e i suoi tempi*. Riv. Internazionale, Aug., 1913. Pp. 35.

OZANAM (1813-1853) was a leading priest of his time; his social views are held to be of permanent interest to Roman Catholics.

MONTPETIT, E. *L'indépendance économique du Canada français*. Rev. Econ. Canadienne, May-June, 1913. Pp. 14.

Based on Bonchette's book of the same title; written from the nationalist and protectionist standpoint, but moderate in tone, and pleading particularly for the development of extractive industries, and for better technical education.

DE NOUVION, G. *Le République Argentine d'après les publications récentes.* Rev. Intern. du Com., Mar., 1913. Pp. 131.

Continuation of a preceding article, completing an historical and statistical sketch of the development of the Argentine Republic.

PAWLOWSKI, A. *La situation économique et financière de l'Italie.* Journ. des Econ., Apr., 1913. Pp. 17.

A concise and useful statistical survey, which shows that Italy prospered and developed even in a period of war.

QUESSETTE, F. *L'administration financière des Etats de Bretagne de 1689 à 1715.* Ann. de Bretagne, Jan., Apr., 1913. Pp. 16, 15.

RAFFALOVICH, A. *Un recensement économique et financier de l'Allemagne.* L'Econ. Franç., July 26, 1913. Pp. 2.

A summary of Helfferich's contribution to the volume published to commemorate the progress during the twenty-five years of the reign of William II.

RAUDNITZ, J. *Die staatswirtschaftliche Entwicklung Bulgariens.* Zeitschr. f. Volkswirtsch., XXII, 2-3, 1913. Pp. 33.

A good summary and appreciation of Bulgarian public finance (revenues, expenditures, and debt).

REGISTER, L. B. *Notes on the history of commerce and commercial law: I, Antiquity.* Univ. of Penn. Law Rev., May, 1913.

SIMKHOVITCH, V. G. *Hay and history.* Pol. Sci. Quart., Sept., 1913. Pp. 18.

A contribution, fresh and interesting, to one of the moot points of economic history, the problem of the village community. The author explains the persistence of open-field holdings by the lack of roots and grasses, and of the stimulus to cultivation in severalty which followed their introduction and led to the enclosures. He shows how division among heirs may lead to intermixed holdings; but does not discuss the question of the existence of the strips *ab initio* as a result of the process of clearing. He does not touch at all that feature of mediaeval agrarian organization which is most baffling and most important, namely, the equality of the holdings, not as between members of the same family (explained by inheritance), not as between families in the same village (as in Russia, explained by the fiscal pressure of the central government), but as between villages of the same country (cf. the English virgate), and even of the different countries (cf. the German *Hufe*, etc.).

SZTERENYI, J. *Die ungarische Industriepolitik.* Zeitschr. f. Volkswirtsch., XXII, 2-3, 1913. Pp. 40.

A clear statement of the measures taken in Hungary during the past generation to meet the problems of housework, handicraft, and the factory system. The results, in the author's opinion, are well worth the cost.

THOMPSON, F. C. *The agrarian legislation of Spurius Thorius.* Classical Rev., Feb., 1913.

THOMPSON, M. S. *Social and economic conditions in Greece*. Sociol. Rev., July, 1913. Pp. 8.

VERMALE, F. *La cherté de la vie à Paris en floréal an III (avril-mai, 1795) d'après des lettres inédites*. Ann. Révolut., Mar.-Apr., 1913.

VIMARD, H. *Un centre industriel en Pologne: Lodz*. Rev. Sci. Pol., May-June, 1913. Pp. 27.

Brief historical sketch, and social and economic analysis.

WEISS-BARTENSTEIN, W. K. *Ueber Bulgariens volkswirtschaftliche Entwicklung*. Zeitschr. f. Volkswirtsch., XXII, 2-3, 1913. Pp. 22.

An article notable among others of its kind for its clear description of the economic organization without the padding of extended statistical data.

WEBER, L. *Le rythme du progrès et la loi des deux états*. Rev. de Méta-physique, Jan., 1913. Pp. 45.

A study of technical and cultural progress.

WILMERSDOERFFER, E. *Die wirtschaftliche Lage Italiens in der Gegenwart*. Schmollers Jahrb., No. 2, 1913. Pp. 21.

A lecture discussing the recent past, the present, and the future.

Economic Geography

(Abstracts by E. V. D. Robinson)

HEROX, W. B. *Land classification: Its basis and methods*. Ec. Geol., June, 1913.

Remaining public lands are in arid and semi-arid districts, hence value for grazing, agriculture, or even mining turns chiefly on water supply. Classification on this basis is, therefore, indispensable to intelligent use. Tracts containing possible watering places for stock were withdrawn from entry in 1912, pending the elaboration of a leasing system. Classification is also in progress with reference to dry farming, irrigation, and water power.

MENDEL, J. *Die internationale Organisation der Petroleumgewinnung und des Petroleumhandels*. Weltwirtsch. Archiv, July, 1913.

An excellent review of the petroleum industry in all countries, considered both from the standpoint of production and consumption. The writer calls it an international industry.

NASON, F. L. *Some suggestive phases of the iron mining industry of eastern North America*. Journ. Can. Min. Inst., Vol. XIV.

RICKETTS, A. H. *The truth about "Pinchot's doughnuts."* Min. & Engg. Wld., July 26, 1913.

A violent attack on the administration of the federal forest reserves, by a San Francisco lawyer. Appears to represent the viewpoint of waterpower and land companies.

SCHACHT, H. *Zur Finanzgeschichte des Ruhrkohlen-Bergbaues*. Schmollers Jahrb., No. 3, 1913.

A somewhat detailed account by districts, from the period when

mining was a side industry carried on by peasants, down to the present.

SINGER, C. *The early history of tobacco*. Quart. Rev., Aug., 1913.

Antiquarian rather than economic in character.

TOWER, W. S. *Nitrate fields of Chile*. Pop. Sci. Mo., Sept., 1913.

Popular sketch of development and organization of nitrate industry. Some good illustrations. Origin of deposits is attributed to guano.

Cost of reclamation service and other irrigation projects in Colorado. Engg. News, Aug. 21, 1913.

Endeavors to show that government irrigation works cost about double as much to build and operate as private systems. Director Newell in reply points out that the easier and more profitable projects were taken up first by private capital, only those being left for the reclamation service which private capital refused to undertake.

Agricultural Economics

(Abstracts by John Lee Coulter)

BECKMAN, F. *Die Entwicklung des deutsch-russischen Getreideverkehrs unter den Handelsverträgen von 1894 und 1904*. Jahrb. f. Nat. Oek., Aug., 1913. Pp. 26.

BRANSON, E. C. *The Georgia Club*. Bull. 23, U. S. Bur. of Edu., 1913. Pp. 41.

A comprehensive review of the work of this club, organized principally to investigate farm-life problems and remedy evils. Includes questions, schedules, and specimen results.

BRUGUIER. *L'Agro Romano e gli usi civic*. Riv. Intern., July, 1913. Pp. 20.

Apropos of a proposed law touching the problem of the Roman campagna.

CALDWELL, J. C. *Long-time loans needed by organized agriculture*. Pamphlet, reprint from "Lexington (Kentucky) Herald," Aug. 20, 1913. Pp. 12.

A carefully prepared statement by a farmer and banker after personal study of coöperation among farmers in different European countries.

COULTER, J. L. *The problem of rural credit or farm finance in the United States*. Special Bull. No. 1, Wis. Sta. Bd. of Agri., Apr., 1913. Pp. 40.

A review of needs in the United States, based upon the present conditions known to exist, with ten recommendations.

COULTER, J. L. *Observations concerning coöperation in rural Europe*. Amer. Coöp. Journ., May, Aug., Sept., Oct., 1913.

Articles describing coöperation as inspected in different countries during an investigation for the United States government.

DAURE, L. *Les fraudes alimentaires*. Mouv. Social, Aug. 15, 1913. Pp. 6.

An analysis of the frauds and falsifications from 1907 to 1911 found by the division of the Department of Agriculture interested in the inspection of cider, vinegar, wine, beer, spirits, etc.

DAVIS, C. H. *Rural banking and currency reform*. Sen. Doc. 140, 63d Cong., 1 Sess., July, 1913. Pp. 19.

An address before the South Carolina Bankers' Association outlining a scheme of rural banks.

DAVIS, C. H. *The Davis plan of rural banks*. Sen. Doc. 141, 63 Cong., 1 Sess., July, 1913. Pp. 27.

An address delivered before the North Carolina Bankers' Association and representatives of the Committee on Rural Finance of the various state bankers' associations of the Southern states, going into many further details than Senate Document No. 140.

EGAN, M. F. *Notes on agricultural conditions in Denmark*. Sen. Doc. 992, 62d Cong., 3 Sess., Jan., 1913. Pp. 34.

Basis of a series of lectures delivered in various southern states in the spring of 1912 under the auspices of the Southern Commercial Congress.

HARRIS, B. F. *The banker and his relation to the public welfare*. Pamphlet, First Nat'l Bank, Champaign, Ill., July, 1913. Pp. 28.

The crystalization of addresses delivered before the state bankers' conventions of six states during the spring. Pertains chiefly to country life.

HARRIS, B. F. *Problems of rural life from the banker's standpoint*. Address delivered before the Chicago Bankers' Club, Oct., 1912. Pp. 20.

All phases of the farmers' business examined by a specialist looking in from the outside.

HILL, J. S. *Coöperation and the work of the American Commission in Europe*. Address delivered at State Convention of Farmers, Raleigh, N. C., Aug. 27, 1913. Pp. 16.

Review of European experience and suggested improvements in the business side of farming in the United States, and particularly in North Carolina.

HOPKINS, C. G. *Facts and fiction about crops*. Science, Mar. 28, 1913. Pp. 6.

A comparative study of the reports of the Census Bureau and Bureau of Statistics of the Department of Agriculture with reference to the production of farm crops.

JONES, G. *Some methods of financing the farmer*. Pamphlet, Denver Chamber of Commerce, Aug., 1913. Pp. 16.

An address delivered before the Conference of Governors and other bodies by a member of the American Commission for the study of European rural credit systems. The author is a leading banker and recognized authority.

LEBOY-BEAULIEU, P. *La production, la consommation et les prix du blé*. L'Econ. Franç., Sept. 20, 1913. Pp. 2.

The second article of a series—the first being in the issue of September 6. A very careful analysis of the relation between the production, consumption, and price of wheat.

McGOVERN, F. E. *The market commission bill, and the governor's communication in relation thereto.* Pamphlet, Mar., 1913. Pp. 42.

Copy of bill submitted to the Wisconsin legislature, proposing a complete supervision of marketing of agricultural products for Wisconsin farmers.

McGOVERN, F. E. *Message to the Wisconsin legislature, regular session.* Pamphlet, Jan. 9, 1913. Pp. 56.

Sections devoted to rural credit, marketing, coöperation, etc.

DE MOLINARI, M. *Mouvement agricole.* Journ. des Econ., June, 1913.

Largely scientific, referring to technical findings in different countries, but reviewing Canada's experience in the control of commerce in that country of the grain trade.

MOSS, R. W. *How we may grant short-time personal credit to the farmers of the United States.* Address, House of Rep., Sept. 11, 1913. Pp. 16.

A review of European systems of rural credit gained by personal observation as a member of the United States Commission to study systems in Europe and recommend a policy for the United States.

MOWRY, H. H. *A normal day's work for various farm operations.* Bull. No. 3, U. S. Dept. of Agri., Sept., 1913. Pp. 44.

A detailed and rather exhaustive study of the problem with careful illustrations and tables to clearly bring out all conclusions.

OSBORN, C. *The town labourer and the land.* Charity Organ. Rev., July, 1913. Pp. 9.

A review of the success of the Vacant Land Cultivation Society organized in London in 1908.

PRICE, H. C. *Rural credit in Germany.* Bull. 18, Ohio State Univ., Feb., 1913. Pp. 31.

A summary of the German systems of rural credit, being a result of several months' study in that country.

ROBINSON, L. G. *Scientific farming and scientific financing.* Ann. Am. Acad., Mar., 1913. Pp. 11.

A general statement of American needs and European experience, with some illustrations of attempts in this country, particularly among Jewish farmers.

THOMPSON, C. W. and WARBER, G. P. *Social and economic survey of a rural township in southern Minnesota.* "Studies in Economics," No. 1, Univ. of Minn., April, 1913. Pp. 75.

One of the best, if not the best, survey of economic and social rural life which has yet appeared.

THOMPSON, C. W. *Studies in egg-marketing.* Bull. 132, Minn. Agri. Exp. Sta., Apr., 1913.

A bureau of research in agricultural economics has been established at the Experiment Station, and this is one of the first special bulletins.

UNSTEAD, J. F. *Tables of statistics with explanatory text, of the wheat cultivation and trade of six European nations during the years 1881-1910.* Geog. Journ., Aug., 1913.

Reviewed in "The Nation," August 28, 1913, p. 190.

VON ENGELKEN, F. J. H. *The German farmer and coöperation*. Sen. Doc. 201, 63d Cong., 1 Sess., Sept., 1913. Pp. 18.

Report of the author who was a member of The American Commission to study coöperation among European farmers.

WOLFF, H. W. *Report on agricultural credit and coöperation in Germany*. Econ. Journ., June, 1913. Pp. 4.

A careful review by one of the greatest authorities in the world of the report of an inquiry into agricultural credit and agricultural coöperation in Germany by J. R. Cahill. This comprehensive report of some 500 pages has been reprinted by the United States Senate for American use.

ZOLLA, D. *Les accidents du travail et les intérêts agricoles en France et à l'étranger*. I. Rev. Sci. Pol., July-Aug., 1913. Pp. 18.

This is the first of a series of articles concerning accidents on farms, comparisons are made with records of accidents in general, and the laws under discussion are quoted in full.

Annual report of the Virginia Fruit Growers, Inc., for year ending March 1, 1913. Pamphlet, Staunton, Va., Mar., 1913. Pp. 33.

This is a review of the last year's experience of a mutual selling and purchasing agency, and contains much of interest to the scientific economic student. The two preceding annual reports are equally instructive.

Lists of . . . agricultural organizations in the United States. Sen. Doc. No. 1109, 62d Cong., 3 Sess., Feb., 1913. Pp. 125.

A very useful list of organizations of farmers compiled in response to Senate Resolution of December 12, 1912, under the direction of the Secretary of Commerce and Labor and the Secretary of Agriculture.

Report of the delegates of the United States appointed to attend the General Assembly of the International Institute of Agriculture at Rome in May, 1913. Sen. Doc. 196, 63d Cong., 1 Sess., Sept., 1913. Pp. 64.

Includes minutes of meetings, together with record of all actions taken by the General Assembly, and reviews the work of the Institute and the permanent delegate.

Report of committee appointed by the governor of North Carolina on needs of North Carolina farmers with regard to credits, marketing, and coöperation. Oct., 1913. Pp. 13.

The result of a careful study of the needs of North Carolina farmers with a series of careful recommendations.

Commerce

ANDREADES, A. *La marine marchande grecque*. Journ. des Econ., Sept. 15, 1913.

DIETRICH, B. *Die Ausfuhr von Qualitätsware und der internationale Muster-schutz*. Weltwirtsch. Archiv, July, 1913.

DOEHLE, W. *Der Tabakmarkt in Holland*. Weltwirtsch. Archiv, July, 1913.

- HARRIS, H. W. *Methods of selling American goods in Europe. Germany.* Daily Cons. & Trade Rpts., Aug. 18, 1913. Pp. 7.
- HERNER, H. *Die "internationale Schiffsvermessung" im Verhältnis zu ihrer weltwirtschaftlichen Bedeutung.* Weltwirtsch. Archiv, Oct., 1913.
- MICHEL, R. *Tendenzen des italienischen Handels im östlichen Mittelmeer.* Weltwirtsch. Archiv, July, 1913.
- MURRAY, S. L. *The deflection of our export trade in time of war.* Nineteenth Cent., Aug., 1913.
- ROSENBAUM, S. *The trade of the British Empire.* Journ. Royal Statist. Soc., July, 1913. Pp. 36.
- SHORTT, A. *The balance of trade in Canada.* Census & Statist. Mo., July, 1913.
- WHELPLEY, J. D. *Foreign trade in the United States.* Century, Oct., 1913.
- How 5,000,000 people are fed.* Greater N. Y., Oct., 1913.
- Railway coöperative stores in New York.* Elec. Ry. Journ., July, 12, 1913.

Railways

(Abstracts by Ernest R. Dewsnap)

- ALLIX, G. *L'exploration des chemins de fer en Italie.* Journ. des Transports, June 28, July 5, 1913. Pp. 5.

Points out that the advantages conferred upon the personnel of the railways and upon the public are being secured at the cost of a decreasing net income, insufficient to cover interest charges upon capital.

- ALLIX, G. *La hausse générale des prix et les tarifs des chemins de fer.* Journ. des Transports, Aug. 23, 1913. Pp. 3.

A review of an article by M. C. Colson; concludes that an increase of railway charges will be inevitable sooner or later.

- ALLIX, G. *Canal et voie ferrée.* Journ. des Transports, Sept. 27, 1913. Pp. 3.

A reply to an article by M. Marcel Parte in the "Revue d'Economie Politique." Calls attention to the abandonment of the scheme for the canalization of the Moselle, to the failure of the Austrian canal project of 1901, etc.

- AMOROSO, L. *Uno stato nello stato.* Giorn. d. Econ., June, 1913. Pp. 15.

A vigorous attack on the Italian railroads as a state within the state.

- BOURNE, J. *National aid to good roads.* N. Am. Rev., Sept., 1913. Pp. 12.

A proposal that the federal Treasury should purchase state bonds, applying the difference, between the interest (4 per cent) that they would receive from the states and the interest (3 per cent) that they would pay, to the establishment of a sinking fund which would liquidate the principal in 50 years.

- DUNN, S. O. *Wanted: a commission on railroad accidents.* Atlantic, July, 1913. Pp. 8.

Remedies for the present situation are to be found in trespass laws, in training and discipline of men, in improvement of the physical

plant. Suggests that a commission be appointed to investigate the whole accident problem.

EDGEWORTH, F. Y. *Contributions to theory of railway rates*. Econ. Journ., June, 1913. Pp. 21.

The writer is confirmed in the deduction that discrimination accompanied with a moderate control is likely to be better, both for the customers and the monopolist, than monopoly forbidden to discriminate.

FAVARGER, P. *Les comptes des chemins de fer fédéraux en 1912*. Journ. des Econ., July, 1913. Pp. 15.

Though nationalization of railways in Switzerland has brought noteworthy advantages to employees and the public, the internal traffic still has to bear charges double those of neighboring countries, nor is any reduction in sight.

HAYES, H. V. *Original cost versus replacement cost as a basis for rate regulation*. Quart. Journ. Econ., Aug., 1913. Pp. 15.

Original cost should be interpreted as the sum of money expended by the undertaking for the property now in use for the benefit of the public.

HILL, J. G. *Government ownership of railway freight equipment*. Everybody's, Sept., 1913.

The government should purchase all freight cars and rent them out at a per diem charge of 50 cents plus 1 cent per car per mile.

HULIT, A. B. *The question of increased freight rates*. Ry. Age Gaz., July, 25, 1913. Pp. 2½.

The managing director of the American Agricultural Association believes that an advance would relieve congested financial conditions, and would be in the interests of farmers and manufacturers.

JOHNSON, A. B. *Are American railroads overcapitalized?* Ry. Age Gaz., Aug. 15, 1913. Pp. 2½.

The writer, who is the president of the Baldwin Locomotive Works, finds that a comparison with conditions in Europe reflects favorably upon America's railways. A permanent policy of protection to railway revenues is needed. The same article appears in the "Railway World" for September.

JONES, E. *The commodity clause legislation and the anthracite railroads*. Quart. Journ. Econ., Aug., 1913. Pp. 37.

A history of the enactment and enforcement of the "commodity clause" of the Hepburn act. Even though further Supreme Court decisions should restore vitality to the clause so that in other industries it may be thoroughly enforced, it is extremely doubtful whether, in the anthracite industry, competitive conditions would be completely restored.

KUHN, J. E. *Some aspects of the subject of transportation*. Pro. Engrs. Club of Phila., July, 1913.

A general discussion of transportation facilities in the United States, with reference to the rapid increase of population and of traffic demands.

LAWSON, A. J. *Tramways of the United Kingdom*. Electrician (London), Aug. 8, 1913.

The financial position of the tramways is presented.

LEHFELDT, R. A. *Finance of railway nationalisation in Great Britain*. Econ. Journ., Sept., 1913. Pp. 8.

There seems to be almost nothing to encourage the view that railway nationalization would be a good thing financially.

MELCHIOR, R. *Die preussischen Staatseisenbahnen in ihren Ergebnissen und ihrer Finanzgebarung verglichen mit der Pennsylvania Railroad und der London and North-Western Railway*. Schmollers Jahrb., No. 2, 1913. Pp. 44.

Concludes that the Prussian state railway regarded as an economic enterprise has little cause to fear comparison with the best foreign railways.

NEWCOMB, H. T. *Mr. Barber on government ownership of railways. A rejoinder*. Ry. Wld., Sept., 1913. Pp. 4½.

The experience of Europe does not show that government ownership would reduce accidents, nor that it would reduce expenses; it would cause an inevitable rise in the rate of interest payable.

PIGOU, A. C. and TAUSSIG, F. W. *Railway rates and joint costs*. Quart. Journ. Econ., Aug., 1913. Pp. 8.

Professor Pigou thinks that there is a vital distinction between the common and joint risks of producing cotton fibre and cotton seed and the common costs of producing copper transport and coal transport. Professor Taussig does not admit the importance of this distinction, and urges that the principle of joint cost may be applicable, though a supply of one thing does not necessarily entail the supply of another.

PREYER, O. E. *Die Entwicklung des chinesischen Eisenbahnwesens in den letzten drei Jahren (1909 bis 1911)*. Archiv f. Eisenbahnw., July-Aug., 1913.

In 1908 there were in operation 4160 miles of lines and under construction 1440; in 1911, these figures were 6160 and 900 miles respectively. The proportion of operated lines in Chinese hands increased from 13 per cent to 57½ per cent.

RILEY, C. C. *Increasing freight car performance*. Ry. Age Gaz., Sept. 26, 1913. Pp. 2½.

Describes the methods of investigation and supervision that are used on the Baltimore and Ohio R. R. to increase mileage and loading averages.

RIPLEY, E. P. *Car shortage*. Ry. Age Gaz., Sept. 5, 1913. P. 1.

Car shortage is almost a world-wide condition, especially prevalent where industry and commerce are expanding.

SCHIMPF, G. *Wirtschaftliche Betrachtungen über Stadt- und Vorortbahnen*. VI. Archiv f. Eisenbahnw., Mar.-Apr., 1913. Pp. 34.

Conclusion. See REVIEW, vol. II, p. 987; vol. III, pp. 221, 495.

SWERGAL, E. E. *Alaska's need of railway development.* Ry. Age Gaz., Sept. 5, 1913. Pp. 3.

Inadequacy of existing facilities and proposed improvements.

WEHRMANN. *Stimmen aus verschiedenen Ländern über die Verstaatlichung der Eisenbahnen.* Archiv f. Eisenbahnw., May-June, 1913. Pp. 18.

Abstracts of papers in the volume on *The State in Relation to Railways*, published by the Royal Economic Society of London. (Papers by Pierre Leroy-Beaulieu, Schumacher, Mahaim, Acworth, Dewsnup, Stephenson, and Stevens.)

WELLIVER, J. C. *Making a valuation of our railways.* Rev. Rev., Aug., 1913. Pp. 6.

Indicates the nature of the task before the Interstate Commerce Commission, its probable cost, and the steps already taken to organize the work.

WORTHINGTON, B. A. *Increasing freight car efficiency.* Ry. Age Gaz., Aug. 29, 1913. Pp. 1½.

A discussion, by the president of the Chicago and Alton Railroad, of the causes of delays to equipment in yards, and the means that are being used on his road for remedying them.

Boston loses differential case. Ry. World, July, 1913. P. ½.

The Interstate Commerce Commission held that rates on import traffic should not be lower from Boston than from New York.

Getting more movement for freight cars. Ry. Age Gaz., Sept. 5, 1913. Pp. 1.

Methods of increasing efficiency are suggested by two railway officials.

An interesting transportation system. Ry. Age Gaz., Sept. 19, 1913. Pp. 6½.

An illustrated article which describes the operation of the chain of water and rail communications of the United States Steel Corporation connecting the Minnesota mines with the Pittsburgh mills.

The limitations of regulation. Ry. Age Gaz., July 18, 1913. Pp. 2.

A sharp criticism of the report of the Interstate Commerce Commission on the railway situation in New England: the report itself, in leaving a loose end for every subject discussed, marks the limitation of government regulation of privately owned enterprise.

New Illinois public utilities law. Ry. Age Gaz., July 18, 1913. Pp. 1.

A commission of five members, with salaries of \$10,000 each and seven year appointments, is authorized. The law is modeled closely after that of Wisconsin.

Progress in the federal valuation of railways. Ry. Age Gaz., Oct. 3, 1913. P. 1.

The Board of Engineers of the Interstate Commerce Commission and the engineers' committee of the railways are reaching a common understanding on many important matters.

Railroad cost and efficiency. Ry. Age Gaz., July 11, 1913. Pp. 1½.

Suggests that railway expenditures might be pro-rated between the

passenger service and the freight service on the basis of value of service.

The railroad's attitude on the rate question. Ry. World, July, 1913. Pp. 2.

Summary of President Willard's speech before the Boston Chamber of Commerce. A five per cent horizontal increase in rates urged on the ground of increased costs of operation.

Railway efficiency. Nation, Oct. 2, 1913. P. 1/2.

The railways have been exploiting the possibilities of scientific management for the last 16 years or more.

Railway statistics. Archiv f. Eisenbahnw., Mar.-Apr., May-June, July-Aug., 1913.

Austria, British India, German Africa, Prussia-Hesse, Siam—all for 1911 (March-April); Alsace-Lorraine, Bavaria, Netherlands, for 1911, and Sweden for 1909 (May-June); France, Hungary, and Wurtemberg for 1911, and Russia for 1909 (July-August).

Rate decision will promote city's commerce. Greater N. Y., Sept. 15, 1913. Pp. 4.

Abstracts are given of the recent decisions of the Interstate Commerce Commission, reducing rates to Duluth, the upper Mississippi crossings, and interior Iowa and Kansas points. General effect will be to break down barriers against New York on the Middle West.

Select list of references on train crew legislation. Special Libraries, June, 1913.

Four pages of references.

State rights and the railroads. Ry. World, July, 1913. Pp. 5.

An explanation of the significance of the decision of the Supreme Court on the Minnesota rate case.

Studies of operation—the C. B. & Q. Ry. Age Gaz., July 18, 1913. Pp. 3.

A growth in freight traffic of 98.3 per cent, from 1901 to 1912, was handled with a decrease of 9.8 per cent in train-miles.

Traffic improvements of the Connecticut Company. Elec. Ry. Journ., Aug. 16, 1913.

Gives an analysis of the financial and operating results secured after the consolidation of various trolley lines.

Transportation of freight. Elec. Ry. Journ., Oct. 4, 1913. Pp. 19.

Replete with details of the organization and working of the freight department of the interurban railway. Numerous photographs.

L'association des actionnaires et obligataires des chemins de fer français. Journ. des Transports, Sept. 20, 1913. Pp. 2 1/2.

The association is interesting itself in (1) pension legislation, (2) problems presented by the expiration of the interest guarantees, (3) proposed legislation concerning the appointment of "agents superieurs," and (4) the movement of railway values.

Le chemin de fer Transpersan. Journ. des Transports, June 28, 1913. P. 1.

The Russian commission appointed to study the project has reported in favor of the construction of the railway from Aliata to Astara,

which will be the Russian link of the trans-Persian railway connecting Europe with India. The new line should reduce the time of transit from London to Bombay from the present 22 days (by sea) to 7½ days.

Les chemins de fer Belges, I. Journ. des Transports, Sept. 27, 1913. Pp. 2.

The services and charges of the system are dealt with.

Dix ans d'exploitation par l'état. Journ. des Transports, July 10, 1913. Pp. 3½.

A recital of improvements in the service and wage conditions of Swiss railway employees. But, it is asserted, the men are not satisfied.

La nouvelle convention de l'état avec la compagnie transatlantique. Journ. des Transports, Sept. 6, 1913. Pp. 2½.

Explains, with approval, the new agreement between the French government and the Compagnie Générale Transatlantique for the conveyance of mail between Havre and New York.

Le nouveau "Railway Act" anglais de 1913. Journ. des Transports, Aug. 10, 1913. Pp. ½.

A reference to the recent act of parliament authorizing a general increase of English railway tariffs.

Deutschlands Getreideernte im Jahre 1910 und die Eisenbahnen. Archiv f. Eisenbahnw., May-June, 1913. Pp. 26.

Regional statistics of the movement of grain within Germany.

Die Eisenbahnen der Erde, 1907-1911. Archiv. f. Eisenbahnw., May-June, 1913. Pp. 15.

During 1911 there was an increase in mileage of 2.7 per cent, as compared with 2.3 per cent for the preceding year. The total mileage was rather more than 660,000, 30 per cent of which was state-owned.

Erweiterung und Vervollständigung des preussischen Staatseisenbahnnetzes im Jahre 1913. Archiv f. Eisenbahnw., May-June, 1913. Pp. 42.

Prussia proposes to spend 108½ million dollars during 1913 in establishing new lines, double-tracking, procuring equipment, etc.

Accounting

(Abstracts by John Bauer)

"ARCANUS." *The prevention of fraud in small businesses.* Accountant, Sept. 20, 1913. Pp. 4.

A prize essay. Discusses simple accounting and checking devices.

BENTLEY, C. H. *A problem in the distribution of expense burdens.* Journ. Account., July, 1913. Pp. 26.

Briefly explains A. Hamilton Church's principles of distributing indirect expense, then presents and works out an extended problem to illustrate the application of the principles.

BERRIDGE, A. *The treatment of interest on manufacturing investment.* Journ. Account., July, 1913. Pp. 3.

Holds that interest should not be included in manufacturing costs.

BUTTS, W. E. *Bringing an old water-works valuation up to date.* Engg. News, Aug. 28, 1913. Pp. 2.

Presents index numbers of waterworks construction costs for 1884 to 1909, and shows that they run fairly parallel with the index numbers of general commodity prices averaged with the index numbers of cast-iron pipe prices. This parallelism is suggested as a basis for bringing an old works valuation up to date.

CAMPBELL, J. R. *Public accounting; its organization and relation to administration.* Accountant, Sept. 20, 1913. Pp. 8.

Explains why government accounting is much less perfect than commercial accounting. Discusses standards and ideals, and compares especially English and United States experience.

CULSHAW, W. *Motors for municipalities—the economic aspect.* Accountant, July 26, 1913. Pp. 4.

Presents the costs of the Highways Department of the City of Westminster for three fiscal years, 1906, 1910, and 1913. The average cost per ton for motor work was 2s. 9.28d., hired horse work, 3s. 4.99d., and city horse work, 3s. 10.12d.

CLARK, P. G. *Hints to accountants, liquidators and receivers on office and factory control.* Accountant, Sept. 13, 1913. Pp. 8.

A suggestive paper on various matters, especially as to how the typewriter may be used for time saving in accounting, and how the purchase and sales books may be adopted for cost keeping.

FISHER, E. L. I. *Determination of probable operating revenue.* II. *Estimating operating expense and cost of construction.* III. *Hypothetical electric interurban railway.* Elec. R. R. Journ., Aug. 23, Sept. 6, 20, 1913. Pp. 8, 6, 3.

A study of how the profitableness may be estimated in the case of a proposed electric interurban railway. Article I, based on typical existing lines, shows how revenue is related to the number and class of population served; II gives the minimum and average operating expenses and construction costs for typical selected lines; in III, special cases are assumed, and the profitableness is estimated according to the conclusions in I and II.

FISHER, L. D. *Office efficiency as it affects the men.* Journ. Account., July, 1913. Pp. 14.

A general but clear and suggestive discussion. Considers especially space requirement and arrangement, lighting and ventilation, facilities for comfort and well-being, classification of employees, and provision for advancement.

HAYES, R. V. *Original cost versus replacement cost as a basis for rate regulation.* Ry. Age Gaz., Sept. 12, 1913. Pp. 3.

Argues that actual cost figures should be used to supplement replacement cost figures in fixing valuations for rate making.

KEELY, R. R. *Overhead expense distribution.* Journ. Am. Soc. Mech. Engrs., June, 1913.

Discusses methods used in handling indirect expense in manufacturing costs.

McKAY, C. W. *Modern practice in manufacturing plant appraisal.* Mach., May, 1913.

MACLANE, H. F. *Methods of determining shop costs.* Elec. Journ., June, 1913.
Third of a series of articles on works management.

MANN, J. *Notes on the organization of the collector's department of the city of Glasgow.* Accountant, July 12, 1913. Pp. 9.

MONTGOMERY, R. H. *The fallibility of unverified financial statements.* Journ. Account., July, 1913. Pp. 10.

PATTERSON, C. H. *The appointment of the central establishment expenses of local authorities.* Accountant, July 26, 1913. Pp. 5.

RICKARD, T. H. *The valuation of mines.* Min. & Sci. Pr., May 24, 1913.

THULIN, F. *Scientific analysis of accounts.* Bankers' Mag., Aug., 1913. Pp. 5.

Attempts to show that an account whose balance is due to discounts is not profitable.

TOWLER, K. F. *Cost accounting.* Stone & Webster Pub. Serv. Journ., Aug., 1913. Pp. 6.

A very general article on the aims and methods of cost accounting.

TRENKERT, G. and L. *Wertberechnung und Wirtschaftlichkeit in der Giesserei.* Stahl u. Eisen, Apr. 24, 1913.

WILGUS, W. J. *Physical valuation of railroads.* Pro. Am. Soc. Civ. Engrs., May, 1913.

Favors the principle of cost of reproduction.

C. P. A. laws. Journ. Account., July, 1913. Pp. 13.

A summary of the C. P. A. laws of Delaware, North Carolina, North Dakota, and Wisconsin.

The Dominion Association of Chartered Accountants. Accountant, Sept. 27, 1913. Pp. 7.

A summary of the proceedings and addresses at the meeting of the association at Winnipeg, Sept. 2-4, 1913.

Fundamentals of valuation of public utilities. Ry. Age Gaz., Sept. 12, 1913.

A survey of the development of the theory.

Tramway finances. Accountant, Aug. 16, 1913. Pp. 4.

Discusses depreciation and renewals in connection with the increasing competition of tramways with motor omnibuses.

Valuation of iron mines. Discussion of the paper of James R. Finlay. Bull. Am. Inst. Min. Engrs., May, 1913.

Valuation of steam railroads. Engg. Rec., June 14, 1913.

Public Utilities

BALDWIN, H. DEF. *On the valuation of water works' special franchises.* Am. Water Works Assn., June, 1913.

- EASTMAN, J. B. *The public service commission of Massachusetts.* Quart. Journ. Econ., Aug., 1913. Pp. 8.
- ERICKSON, H. *The regulation of public utilities in Wisconsin.* Journ. W. Soc. Engr., May, 1913.
- HAYES, H. V. *The public's financial interest in public utilities.* N. Am. Rev., Sept., 1913.
- PENDLETON, E. H. *Cincinnati's traction problems.* Nat. Munic. Rev., Oct., 1913. Pp. 12.
- ROEMER, J. H. *Commission control of public utilities.* Elec. Wld., Sept. 13, 1913.
- ROSS, J. D. *Seattle's municipal light and power plant.* Munic. Journ., Aug. 7, 1913.
- SILCOCK, E. J. *The valuation of water-works undertakings on transfer to municipal authorities.* Surveyor, June 13, 1913.
- WALL, E. E. *A study made to determine equitable water rates for the city of St. Louis, Mo.* Engg. & Con., May 28, 1913.
- WILCOX, D. F. *The New York subway contracts.* Nat. Munic. Rev., July, 1913. Pp. 18.
- Analysis of the premises adopted and methods used in determining the cost to reproduce new, together with the depreciation thereon of the physical property of the metropolitan system and the Kansas City and Westport Belt Railway of Kansas City, Mo.* Engg. & Con., May 28, 1913.
- Bibliography on valuation of public utilities.* Pro. Am. Soc. of Civ. Engrs., Aug., 1913.
- Decision of board in Cleveland case.* Elec. Ry. Journ., June 28, 1913.
- Fixing the rate schedule.* Stone & Webster Pub. Serv. Journ., July, 1913. Pp. 13.
- Pennsylvania public service company law.* Ry. Age Gaz., Aug. 29, 1913.
- San Francisco municipal railway.* Elec. Ry. Journ., Oct. 11, 1913.
- States having laws creating public service or railroad commissions.* I. B. A. of A. Bull., Sept. 9, 1913.
- Wallingford municipal electric works.* Munic. Journ., Aug. 7, 1913.

Corporations and Trusts

(Abstracts by M. H. Robinson)

- BAKER, J. N. *Amendment of the Sherman anti-trust law.* Georgetown Law Journ., May, 1913.
- MASSUERO, F. N. *Il monopolio commerciale del petrolio in Germania.* Giorn. d. Econ., Aug., 1913. Pp. 50.
- Examination of the proposed law by which Germany seeks to curb the power of the Standard Oil Company within her borders.

NORSA, R. *Il controllo dei servizi pubblici e le "public service commissions" americane*. Rif. Soc., Aug.-Sept., 1913. Pp. 35.

Nature and results of the control of public utilities in the United States.

PAM, M. *Interlocking directorates: the problem and its solution*. Harvard Law Rev., Apr., 1913.

The consolidations called for large sums of cash, and as a result the bankers were elected directors of many companies, hence conflict of interests, industrial vs. financial. Interlocking directorates should be prohibited in some cases, and publicity as to contracts enforced wherever there is danger of such a conflict of interests.

PINNEB, F. *Petroleum-Monopol oder Kartellgesetz*. Die Bank, Aug., 1913.

Proposes a law regulating combinations and their prices rather than trying the "costly experiment" of an imperial petroleum monopoly.

ROSA, E. B. *The function of research in the regulation of natural monopolies*. Science, Apr., 18, 1913.

Describes the work of the Bureau of Standards in connection with the regulation of gas, electric light and other public utility companies, and argues that the commission method scientifically applied may solve the problem of industrial monopolies.

RYAN, T. F. *Why I bought The Equitable*. N. Am. Rev., Aug., 1913.

A prolix explanation, which may be briefly stated as follows: To put an end to internal quarrels and assist in restoring confidence in the stability of financial affairs.

STIEDA, W. *Altere deutsche Kartelle*. Schmoller's Jahrb., No. 2, 1913.

Contrary to the opinion of the leading German writers, such as Kleinwachten and Schönlauck, the cartel is not a modern institution. As early as 1498 there was organized a full fledged cartel in the coffee trade, and during the next four centuries there were five others in Germany alone.

TSCHIRSCHKY, S. *Internationale Kartelle und private Vereinbarungen*. Weltwirtsch. Archiv, July, 1913.

A short description of sixteen international combinations, in various lines of industry.

VOGELSTEIN, T. M. *Literatur zum Petroleummonopol*. Archiv f. Sozialw., Mar., 1913.

Twenty-eight books, reports, and monographs are reviewed. *Fixed prices versus cut prices*. Outlook, Sept. 20, 1913.

Replies to eight questions propounded in an editorial of May 24, 1913; mostly from those maintaining fixed prices and generally favorable to the system.

Ownership of central stations. Elec. World, Sept. 6, 1913.

Shows that 29 per cent of the central stations producing electric current are owned by syndicates, 23 per cent by municipalities, and 48 per cent by independents. In the eastern states the proportion is more favorable to syndicate control and less to municipal.

Petroleum-Monopol. Archiv f. Sozialwis., Mar., 1913.

An excellent article called out by the proposed imperial monopoly of petroleum trade in Germany.

Reports of current income by industrial companies should be required. Com. & Finan. Chronicle, Aug. 23, 1913.

Industrial companies are in the same stage and have the same attitude toward publicity of reports as the railroads of thirty years ago. The stock exchange should insist upon regular and complete reports.

Die Grenzen der Konzentration. Kartell-Rundschau, Mar., 1913.

Difficulties connected with the administration of large concerns prove the most effective barrier to the further growth.

Investments

CONANT, C. A. *Safeguarding the issue of securities.* Com. & Finan. Chronicle, Aug. 30, 1913. Pp. 2.

GUYOT, Y. *Du placement des capitaux.* Journ. des Econ., Oct., 1913.

HAGEMAN, H. A. *The Big Creek development.* Stone & Webster Pub. Serv. Journ., Oct., 1913. Pp. 12.

LEROY-BEAULIEU, P. *La situation économique et financière aux Etats-Unis.* L'Econ. Franç., June 21, 1913.

Decline in security market not based upon fundamental economic conditions, which continue sound, but rather upon foreign conditions and political agitation.

MITCHELL, W. C. *Security prices and interest rates in 1910-1912.* Journ. Pol. Econ., June, 1913. Pp. 23.

MORAWETZ, V. *Shares without nominal or par value.* Harvard Law Rev., June, 1913.

TARBELL, I. M. *The stock market. II.* American, June, 1913.

THACKARA, A. M. *Regulation of investment securities in Germany.* Daily Cons. & Trade Rpts., Aug. 2, 1913. Pp. 2.

The depreciation of British home investments. Econ. Journ., June, 1913.

A continuation of the article of June, 1912.

Labor and Labor Organizations

(Abstracts by George E. Barnett)

ALEXANDER, F. *Die nebenberuflichen Theatergesellschaften in Deutschland.* Schmollers Jahrb., No. 2, 1913. Pp. 62.

A study of the German amateur theatrical societies in their culture and economic aspects.

BATY, T. *Trade union funds.* Westm. Rev., June, 1913.

BAUER, S. *Fortgang und Tragweite der internationalen Arbeiterschutzzverträge.* Ann. f. Soz. Pol. u. Gesetz., III, 1-2, 1913. Pp. 35.

Reviews the history of international labor conferences, and discusses the proposals which are to be laid before the conference of 1913.

BELL, L. F. *The fixing of minimum wages for women by law*. Am. Employer, Sept., 1913. Pp. 7.

All employers of female labor should be required to pay by the piece, and a commission should fix the minimum piece rate.

BOUDIN, L. B. *Der Kampf der Arbeiterklasse gegen die richterliche Gewalt in den Vereinigten Staaten*. Archiv f. d. Geschichte Sozial., IV, 1, 1913. Pp. 85.

Caustic and partisan, but interesting and well-informed analysis of the historical development of the attitude of the American courts toward labor organization. Covers the entire history from the Cordwainers' cases to the Danbury Hatters' case.

BOWLEY, A. L. *Working-class households in Reading*. Journ. Royal Statist. Soc., June, 1913. Pp. 30.

An intensive investigation of the rent paid, number of rooms occupied, relation of number of wage-earners to number of dependents, and earnings and expenditures of 677 working-class households, selected by taking one house in 20.

CARTER, C. F. *The West Virginia coal insurrection*. N. Am. Rev., Oct., 1913. Pp. 15.

Severely criticises the United Mine Workers.

CHURCH, A. H. *Premium, piece work, and the expense burden*. Engg. Mag., Oct., 1913. Pp. 12.

A comparison of various systems of remuneration on the basis of their relation to a reduction in the general expense burden.

CLARK, J. B. *The minimum wage*. Atlantic, Sept., 1913. Pp. 8.

Considers chiefly the practicability of providing emergency employment for those thrown out of work by minimum wage laws.

COLLIER, N. C. *Workmen's compensation acts as thus far considered in American cases*. Central Law Journ., May 16, 1913.

COMPAIN, L. *Les consequences du travail de la femme*. Grande Rev., May 25, 1913. Pp. 13.

COTTER, A. *Safety methods of steel, railway and manufacturing companies*. Engg. Mag., July, 1913. Pp. 17.

An illustrated description of the more important safety contrivances used by the United States Steel Company.

DOMERGUE, J. *Les maladies professionnelles*. Ref. Econ., June 27, 1913.

The proposed French law making employers responsible for compensation in cases of occupational disease would throw the older workmen out of employment.

DOSCH, A. *The I. W. W. What it is*. World's Wk., Aug., 1913. Pp. 23.

EDLMANN, E. *Juvenile labor exchanges and apprenticeship bureaux in Germany*. Contemp. Rev., Aug., 1913.

A discussion of the apprenticeship problem and of the various systems and schemes for its solution.

FESTY, O. *Le mouvement ouvrier à Paris en 1840. I.* Rev. Sci. Pol., July-Aug., 1913. Pp. 13.

Detailed historical account based on original sources.

FRANCKE, E. *Die zweite internationale Arbeiterschuttkonferenz der Industriestaaten Europas. I.* Soziale Praxis, Sept. 25, 1913. Pp. 3.

An account of the first four days' proceedings of the International Conference for the Protection of Labor.

GAEBEL, K. *Die englischen Lohnämter.* Soziale Praxis, Sept. 18, 1913. Pp. 4.

Attributes success of the English trade boards to the fact that their conclusions have largely been reached by the votes of the laborers and employers and not by the vote of the chairman.

GARCIN, F. *Etat d'esprit syndicaliste.* Journ. des Econ., July, 1913. Pp. 18.

Describes the growing hardships of the workers in the lace industry at St. Etienne, and criticises the policy of restriction of output recently adopted as a remedy by the lace workers' union.

GELDART, W. M. *Trade unions, trade lists, and the law.* Econ. Rev., Apr., 1913. Pp. 12.

A review of the decision in the case of *Vacher and Sons v. The London Society of Compositors*, in which the question of trade-union responsibility for libel under the provisions of the Trade Dispute Act was discussed.

GERARDIN, E. *Les ouvriers du bâtiment au Chili et en Argentine.* Mus. Soc., Mém. & Doc., July, 1913. Pp. 19.

Interesting description of the differences between Chile and Argentina in the character of the buildings, skill of workmen, rates of pay and extent of labor organization.

GIESBERTS, J. *Wie die Grosseisenindustriellen über die Arbeitszeitverhältnisse ihrer Arbeiterdenken.* Soziale Praxis, Aug. 21, 28, 1913. Pp. 7, 3.

A critical review of a book by Reichert on Sunday work and overtime in the German iron industry.

GILBRETH, F. B. *Units, methods, and devices of measurement under scientific management.* Journ. Pol. Econ., July, 1913. Pp. 13.

Describes the various departments in a scheme of scientific management.

GOMPERS, S. *Russianized West Virginia.* Am. Federationist, Oct., 1913, Pp. 12.

A criticism of labor conditions in the mines and of the governor of the state.

GREGG, A. W. *Casting cleaners' wages on the premium basis.* Foundry, May, 1913.

Explains the method adopted in a large Western steel foundry.

HACHIN, J. *Production et consommation; syndicalisme et coopération.* Mouvement Social, Aug. 15, 1913. Pp. 24.

The ideals of syndicalists and coöperators are contrasted, and recent conflicts between the coöperative stores and the unions of their employees described.

HAYEM, J. *Le deuxième congrès du parti républicain démocratique. Un projet de loi sur le contrat de travail.* Rev. Intern. du Com., June, 1913.

The congress discussed a great variety of economic and social proposals among which were a denunciation of syndicalism and legislation, with reference to collective agreements between laborers and employers.

HEISS, C. *Die Entlohnungsmethoden in der deutschen Metallindustrie.* Schmollers Jahrb., No. 3, 1913.

A review and resumé of Lohr's recent monograph, *Beiträge zur Würdigung der Akkordlohnmethode im Rheinisch-westfälischen Maschinenbau.*

HOBSON, J. A. *Scientific management.* Sociol. Rev., July, 1913. Pp. 16.

Questions whether the possible increase in earnings will compensate for the mechanization of the workmen.

ISAAC, A. *Le salaire minimum des ouvrières à domicile.* Réf. Soc., Aug. 1, Sept. 1, 1913. Pp. 11, 13.

Stresses the danger of unemployment from radical minimum wage laws, and deprecates any attempt to fix an ideal minimum.

JOHNSTON, R. H. *Select list of references on train crew legislation.* Special Libraries, June, 1913. Pp. 5.

JORNS, A. *Der zweite österreichische Kinderschutzbund.* Soziale Praxis, Sept. 25, 1913. Pp. 4.

Account of the proceedings of the Austrian Congress for the Protection of Children, held at Salzburg, Sept. 4-6, 1913.

JUON, E. *Lohnfragen in hüttentechnischen Betrieben.* Stahl u. Eisen, June 12, 1913.

A study of the systems of premiums suggested by Taylor and others, with some proposed modifications.

KEIR, D. R. M. *Women in industry.* Pop. Sci. Mo., Oct., 1913. Pp. 7.

Certain physiological effects of factory employment on women workers briefly treated.

KELLOGG, P. U. *Government, people, and labor problem.* Rev. Rev., Sept., 1913. Pp. 10.

The personnel of the new Commission on Industrial Relations, and the problems presented to it.

KING, W. L. M. *How Canada prevents strikes.* World's Wk., Aug., 1913. Pp. 6.

LAUCK, W. J. *Hopes of American wage-earner.* N. Am. Rev., July, 1913. Pp. 9.

The first step toward amelioration should consist in the adoption of a policy of restricted immigration.

LAUGHLIN, J. L. *Monopoly of labor*. Atlantic, Oct., 1913. Pp. 10.

The trade unions cannot make real gains by monopolistic measures. Only an increase in productive efficiency can increase real wages.

LEROY, M. *L'indifférence des ouvriers syndiqués en matière politique*. Grande Rev., May 25, 1913. Pp. 19.

LEVINE, L. *Syndicalism in America*. Pol. Sci. Quart., Sept., 1913. Pp. 28.

A useful historical account of the I. W. W. and its predecessors. Emphasizes the independent origin of American syndicalism.

LOUIS, P. *L'état présent du syndicalisme mondial*. Mus. Soc., Mém. & Doc., June, 1913. Pp. 20.

A general resumé of the present position of trade-unionism in all countries with respect to number of members, revenue, and centralization.

MAHAIM, E. *The general strike in Belgium*. Econ. Journ., June, 1913. Pp. 5.

The strike, political in character, began on April 14, and was concluded on April 28. The maximum number of strikers was 400,000. The labor party emerges with enhanced reputation on account of the remarkable control of the working population shown.

MITCHELL, A. A. *The influence of trade unions on wages*. Edinb. Rev., Aug., 1913.

Stresses the limitations on trade-union influence.

MOORE, S. C. *The trades board act at work*. Econ. Journ., Sept., 1913. Pp. 5.

Describes the effects produced in an English village by the fixing of a minimum wage in the ready-made fustian clothing trade.

NELSON, J. *Bonus and rating for works' executives*. Iron Age, May 15, 1913.

Explains system developed by the Royal Typewriter Company, Hartford, Conn.

NEUKAMP, E. *Fabriklehrlinge. Die rechtliche Regelung ihrer Verhältnisse und deren wirtschaftliche Bedeutung*. Schmollers Jahrb., No. 2, 1913. Pp. 23.

Analyzes the present German legislation relating to apprentices in factories, and suggests changes to secure better training.

DE NOUVION, G. *Les organisations de défense patronale*. Journ. des Econ., July, 1913. Pp. 6.

The French employers' associations form a valuable check to the excesses of the syndicalists, but some of the associations have also monopolistic aims.

PEASE, F. C. *The I. W. W. and revolution*. Forum, Aug., 1913. Pp. 15.

The I. W. W. creed stated by a disciple.

DE PETERIMHOFF, H. *Les charbonnages français*. Mus. Soc., Mém. & Doc., June, 1913. Pp. 26.

Increases in wages in the French coal mines have been accompanied by decline in output. Predicts that the reduction of the working day to eight hours will result in smaller production and higher prices.

POPE, E. H. *Women teachers and equal pay.* Pop. Sci. Mo., July, 1913. Pp. 9.

SCHUBERT, E. R. *Die Organisierbarkeit der Privatangestellten.* Ann. f. Soz. Pol. u. Gesetz., III, 1-2, 1913. Pp. 24.

Discusses the difficulties encountered in organizing the upper classes of wage-earners, that is, clerks, engineers, and foremen.

STEWART, E. *Two forgotten decades in the history of labor organizations 1820-1840.* Am. Federationist, July, 1913. Pp. 7.

A collection of facts showing the extent and character of the labor organization of the period.

STONE, H. W. J. *Labour exchanges in England.* Fortn. Rev., Oct., 1913. Pp. 10.

The exchanges have filled few places, and at a high cost.

THOMPSON, C. B. *The relation of scientific management to the wage problem.* Journ. Pol. Econ., July, 1913. Pp. 14.

The unions should insist on a minimum wage as a basis rate, and on a bonus for the performance of a proper day's work.

VALLEROUX, H. *Où en est la question de l'apprentissage? II.* Réf. Soc., June 16, 1913. Pp. 13.

A general review of the difficulties in reforming the French system of apprenticeship.

VERNEUIL, M. DE. *"L'esprit nouveau" des syndicats anglais; le Ruskin College et le Central Labour College.* Rev. Pol. et Parl., May, 1913.

WOLBELING, P. *Neue Literatur über den Arbeitsvertrag.* Ann. f. Soz. Pol. u. Gesetz., II, 5-6, 1913.

WOLTMANN, A., BRUGMANN, W. *Zur Frage der Arbeits-Verhältnisse in der Gross-eisenindustrie.* Stahl u. Eisen, May 23, 1913.

Discussions on the eight-hour day, Sunday and holiday work; labor insurance, pensions, etc.

YOUNG, G. *A national gazette of unemployed.* Engr. (London), Aug. 1, 1913.

A scheme for state action in dealing with the problem of unemployment.

Constructive trade unionism. A symposium. Am. Federationist, Sept., Oct., 1913. Pp. 28, 14.

Brief communications from the officers of some 25 national trade unions describing the advances made by their unions during the past year.

The cost of living. Ann. Am. Acad., July, 1913. Pp. 81.

Part I, entitled "Wage Standards," consists of eight papers chiefly concerned with the minimum wage.

Municipal responsibility for strike damage. Elec. Ry. Journ., Aug. 2, 1913. Pp. 2.

Extracts from the brief filed by counsel for Wells Fargo & Co. in a suit against Jersey City for damages in a strike. The jury gave

damages not only for the injury to the physical property of the company, but also for the injury done its business.

Report of board in dispute between the British Columbia Electric Railway Company and employees. Labour Gaz. (Ottawa), Sept., 1913. Pp. 38.

Working conditions in New York stores. Nat. Civic Federation Rev., July 15, 1913. Pp. 32.

A comprehensive investigation by the Welfare Department of the National Civic Federation into the conditions of employment of 19 firms with 39,000 employers. The wage statistics are based on the pay-rolls of the firms.

Enquête internationale sur le placement. Bull. de l'Assoc. Intern. pour la Lutte contre le Chômage, July-Sept., 1913. Pp. 230.

Reports on employment bureaus, particularly their statistics, from many countries. Interesting article by Beveridge and Fey on the working of the English exchanges.

Rapports sur la statistique du chômage. Bull. de l'Assoc. Intern. pour la Lutte contre le Chômage, Apr.-June, 1913. Pp. 200.

Valuable reports on methods of collecting unemployment statistics in all important countries, and general articles on the technique of unemployment statistics by leading authorities.

Prices and Cost of Living

(Abstracts by Henry J. Harris)

BISHOP, A. L. *The high cost of living.* Yale Rev., July., 1913. Pp. 14.

General review of the causes of the rise of prices; "the economic problem of living, for all excepting the very poor and the very rich, is both one of high prices and of an attempt at high living."

BOLLES, A. S. *Gold and prices.* No. Am. Rev., July, 1913.

BONNET, N. *La vie chère en Angleterre.* Réf. Econ., Sept., 1913. P. 1.

Discusses the recent British report on cost of living.

BOUSSAC, E. *La hausse des prix.* Ref. Econ., Aug., 1913. Pp. 2.

An increase in prices has not occurred in transportation rates in France, but is inevitable.

DEL MAR, A. *Future contract prices.* Engr. Mag., Oct., 1913. Pp. 6.

An increase in the rapidity of circulation of money or credit instruments acts on prices in the same manner, though not to the same degree, as an addition to the currency; "such an addition to the means of payment does not act upon the prices of all commodities at once, but in the order of their marketability."

DEL VECCHIO, G. *Nuovidati sul costo della vita in Italia.* Giorn. d. Econ., June, 1913. Pp. 8.

A summary of elaborate official data on the cost of living.

FISHER, I. *La hausse actuelle de la monnaie, du crédit et des prix. Comment y remédier.* Rev. Econ. Pol., July-Aug., 1913. Pp. 16.

Exposition of author's plan for a stabilized currency.

FISHER, I. *The monetary side of the cost of living problem.* Ann. Am. Acad., July, 1913. Pp. 7.

The cost of living problem is primarily a monetary one and the solution is to be found in some method of stabilizing the dollar.

FRANKLIN, F. *High prices and the theorists.* No. Am. Rev., Oct., 1913.

GLIER, L. *Die Preiskurve und das Teuerungsproblem. II, III.* Zeitschr. f. Socialwis., July, Aug., 1913. Pp. 15, 26.

II. In the period 1895 to 1911 the price of hides has increased from 40 to 50 per cent; of vegetable oils, 50 per cent or more; of tin, zinc, and lead, 20 per cent or more: and the author holds that these increases are caused by greater demand and diminishing supply.

III. The prices of wood, cotton, wool, and hemp have risen because the supply has either decreased or not kept pace with the demand; the increase of price of iron ore and coal is due to a number of causes connected with production (wages, supplies, freights, social insurance, etc.).

LANIER, H. W. *Conquering the cost of living.* World's Wk., July, 1913. Pp. 8.

Examples of successful coöperative distribution in New England.

McILRAITH, J. W. *Price variations in New Zealand.* Econ. Journ., Sept., 1913. Pp. 7.

Author gives index numbers for New Zealand prices and compares them with Sauerbeck's index. In New Zealand there was an almost continuous decline from 1865 to 1895; from 1895 to 1912 the movement has been upwards, sharply increasing in recent years.

MORTARA, G. *Numeri indici delle condizioni economiche d'Italia.* Giorn. d. Econ., Sept., 1913.

Compares index numbers of consumption with other numbers such as railway tonnage, production of wheat, etc.

PAYEN, E. *La production, la consommation et les prix des divers métaux durant les dix dernières années: I. Cuivre et plomb.* L'Econ. France., Aug. 2, 1913. Pp. 2.

Review of world's figures for copper and lead from 1903 to 1912.

Die Entwicklung des Preisniveaus und des Getreidebedarfs in Deutschland und England in den letzten Dezennien. Jahrb. f. Nat. Oek., Aug., 1913. Pp. 17.

Tables giving absolute and relative figures for the prices of a long list of commodities from 1870 to 1911, with the earlier years in decennial averages.

Money, Credit, and Banking

(Abstracts by Don C. Barrett)

ANDERSON, C. E. *Hongkong currency reform.* Daily Cons. & Trade Rpts., July 26, 1913. Pp. 3.

ANDREW, A. P. *The cruz of the currency question.* Yale Rev., July, 1913. Pp. 26.

The paramount need is the establishment of a banker's bank, to-

gether with flexible reserve requirements and notes issued, not as an "asset currency," but by some superior banking agency. An excellent article.

BARCLAY, G. R. *The use of cheques in France*. Journ. Soc. Comp. Legis., July, 1913. Pp. 4.

The system of crossing checks under the law of December, 1911.

BENDIXEN, F. and HEYN, O. *Der Kampf um den Geldwert*. Zeitschr. f. Socialwis., Aug. 10, 1913. Pp. 9.

A controversy concerning the merits of Bendixen's *Geld und Kapital*. Largely a war of words. Bendixen holds that Heyn is not warranted in dragging the theory of value into the problem of determining the value of money because money is not a commodity.

BLUM, L. L. *Le crédit populaire*. Rev. Intern. du Com., June, 1913. Pp. 9.

The convention at Limoges in 1911 set on foot a movement for extending bank loans to small business men and farmers, which is profoundly affecting the development of France.

CORRINGTON, M. *The clearing house as a basis for currency issues*. Banking Law Journ., Aug., 1913.

CRUGER, H. *Die Schulze-Delitzschschen Genossenschaften in Posen ein Bollwerk des Deutschtums*. Mit einem Nachwort von Gustav Schmoller. Schmollers Jahrb., No. 2, 1913. Pp. 16.

Shows the difficulties Germans have in Poland to hold their own against the Poles themselves in ability to use coöperative banks. These banks should not be used for political purposes.

DEL VECCHIO, G. *La questione del cambio*. Rif. Soc., Aug.-Sept., 1913. Pp. 25.

Elimination of alleged factors that are found to be irrelevant makes necessary the admission that the increasing cheapness of paper currency in Italy is due to the excessive issue of paper.

FORD, W. F. *The decreasing value of money*. Fortn. Rev., July, 1913.

Popular presentation of "gold theory" of prices.

GEISER, A. *La "tutela dei risparmi" e gli emendamenti della giunta generale del bilancio*. Rif. Soc., Aug.-Sept., 1913. Pp. 18.

Shows that the public care of savings as advocated in Parliament involves investment in securities whose principal value is declining.

JOHANNSEN, N. *Crop notes*. Bankers Mag., 1913. Pp. 6.

Plan for a governmental issue of supplementary notes based on collateral, for crop-moving period.

LAFOND, G. *Le système monétaire de l'Argentine et les organes de la circulation*. Journ. des Econ., Aug. 15, 1913. Pp. 21.

Traces the legal and economic history of paper money in Argentina, and the recent growth and importance of the Argentine Bank.

LANSDURGH, A. *Fünf Jahre Hypothekenbankwesen*. Die Bank, Sept., 1913. Pp. 7.

LANSDURGH, A. *Goldwunderung*. Die Bank, Sept., 1913. Pp. 14.

Discusses suggestions for improvement of means of international

payments. For political, financial, and economic reasons, he rejects both the proposal for replacement of gold by any other metal and for control by a banking system. A third plan will be discussed in a later article.

LANSEBROUGH, A. *Praktische Geldpolitik. II. Geldwert und Aussenhandel*. Die Bank, June, 1913. Pp. 13.

Analyzes different means proposed for increasing Germany's war-chest. Concludes neither various substitutes for money nor foreign gold loans are practicable. The desired end can be attained only by taxation or by treasury note issue of small denominations.

LUFFT, H. *Die russische Reichsbank im Dienste der russischen Wirtschaftspolitik*. Die Bank, June, 1913. Pp. 14.

Russia's policy of encouraging loans to the peasantry has resulted in grain exports and gold imports, and has strengthened her position in European money markets. Her deposits in other countries, originally forced from her, are now maintained with ease and constitute a source of power in European politics.

McARTHUR, P. *Canadian banking system*. Forum, July, 1913.

The Canadian system has enabled twenty men to control all the important financial, transportation, and industrial interests of Canada. The decennial revision of the bank act is inadequate.

MERRIAM, J. R. *Stories of elastic currency*. World's Wk., Sept., 1913. Pp. 3.

Elementary explanation, by example, of elasticity to be offered by the Glass-Owen bill.

MOSS, R. W. *Money for the farms*. World's Wk., Oct., 1913. Pp. 3.

Privilege of rediscount rather than coöperative organization is the foundation of European agricultural credit. Advocates a system of land mortgage credit for America.

OWEN, R. L. *Currency legislation. Origin, plan, and purpose*. No. Am. Rev., Oct., 1913. Pp. 14.

A survey of currency history since 1900. Detailed outline of the Owen-Glass bill. Considers proposals from Chicago conference of bankers.

SUBERCASEAUX, G. *Das Papiergeld im nationalen und internationalen Zahlungsverkehr*. Weltwirtsch. Archiv, July, 1913. Pp. 8.

Paper currency answers very well for a single country, but in international trade a currency of real value is necessary.

TARBELL, I. M. *Hunt for a money trust*. American, July, 1913.

Articles in this series present an analysis of the testimony from the Pujo committee report.

UNTERTMYER, S. *Currency legislation*. No. Am. Rev., Oct., 1913. Pp. 29.

Discusses favorably the underlying principles of the Glass-Owen bill. Suggests amendments.

WARBURG, P. *Currency legislation. Criticism and suggestions*. No. Am. Rev., Oct., 1913. Pp. 29.

Compares the Owen-Glass bill and the Aldrich plan. Suggests 4 instead of 12 reserve banks, and a plan for dealing with the note issue and the 2 per cent bonds. Favors a federal reserve board.

WESTON, E. M. *Gold production in relation to humanity; a study of the question: has gold depreciated in value?* Journ. Chem., Met. & Min. Soc. of S. Africa, Apr., 1913.

WUTTIG, M. *Zur genossenschaftlichen Zentralkassenbewegung. II.* Die Bank, July, 1913. Pp. 13.

The development of the central bank movement in Germany since the establishment of the Prussian central bank, and its relation to the Raiffeisen system.

Banking customs and banking laws. Journ. Am. Bankers Assoc., July, 1913. Pp. 7.

Illustrates development of the law governing notes, checks, etc. Discusses debatable rules of conduct which confront bankers.

The centralization of the banking system and the banks for special credit. Bull. Econ. & Soc. Intelligence, Sept., 1913. Pp. 6.

Evidences of the movement in Japan toward combining independent banks as branches under large institutions.

English banks and foreign deposits. Economist, Sept. 20, 1913. P. 1.

Arguments for and against the extension of English banking through foreign branches.

Financial services auxiliary to the work of the postal savings banks. Bull. Bur. Econ. & Soc. Intelligence, Aug., 1913. Pp. 10.

Among other services, these banks are extending the use of checks among small business men in Europe.

The postal savings banks. Bull. Bur. Econ. & Soc. Intelligence, July, 1913. Pp. 9.

Organization in Japan, amount of business in the country and in provinces. Distribution of savings according to callings.

Progress of international postal savings bank and the interests of agriculture. Bull. Bur. Econ. & Soc. Intelligence, Aug., 1913. Pp. 43.

A comparative study of character and functions of such banks in several countries. It is impossible to state whether agricultural loans represent the proportion of savings made by agricultural classes.

Recent gold coinages of the world. Bankers Mag., Aug., 1913. Pp. 6.

Growth of coinage, its effects on prices and on England's position as financial center.

Twenty-first annual meeting of the United States League of Local Building and Loan Associations. Am. Bldg. Assoc. News, Aug., 1913.

Who owns the banks? Com. & Finan. Chronicle, Aug. 23, 1913. P. 1.

A typical national bank exemplifies widely scattered ownership of shares.

Les opérations des caisses d'épargne. L'Econ. Franç., Aug., 1913. Pp. 3.

A statistical statement of the condition of French savings banks.

Public Finance

(Abstracts by C. C. Williamson)

ANDREADES, A. *Le régime fiscal des successions en Grèce*. Mouv. Econ., Aug.-Sept., 1913. Pp. 16.

BAMBERGER. *Erbschaftsteuer*. Grenzboten, No. 2, 1913. Pp. 3.

BONNARD, R. *Les finances de guerre*. Rev. Sci. Légis. Finan., Apr.-May-June, 1913. Pp. 48.

A general article on war financiering. Formulates the principles governing the use to be made of the war reserves, taxes, and loans.

BOUGIN, E. *La réfection du cadastre*. Réf. Econ., Apr. 4, 1913. P. 1.

The tax maps, or cadasters, now in use in France were prepared so long ago that they have become exceedingly inadequate. In spite of the great expense involved, a referendum vote recently taken in a given commune was almost unanimous for reconstruction of the cadasters.

BOURLIER, A. *Les dettes communales en Allemagne*. Nouvelle Rev., 1913. Pp. 8.

BOUVIER, E. *Chronique financière étrangère (Japan)*. Rev. Sci. Legis. Finan., Apr.-May-June, 1913. Pp. 14.

BROUSSE, E. *Le contrôle de la cour des comptes sur les dépenses publiques*. Rev. Pol. et Parl., Aug., 1913. Pp. 10.

BROUSSE, E. *Nos pratiques budgétaires*. L'Econ. Franç., Aug. 9, 1913. Pp. 2.

Faulty budgetary methods are held to be one of the principal causes of the formidable increase in expenditures. Calls for a more strict legislative control over executive officers.

BROUSSE, E. *La spécialité des crédits budgétaires*. L'Econ. Franç., Oct. 4, 1913. Pp. 2.

A discussion of parliamentary control over the execution of the budget. The problem of using a highly segregated budget without interfering with administrative effectiveness.

BRYAN, G. J. *Advance in tax laws in Canada*. Single Tax Rev., Oct., 1913. Pp. 8.

CARONCINI, A. *La nuova tariffa doganale americana*. Rif. Soc., June, July, 1913. Pp. 20.

CLARKE, E. F. *Memorandum in relation to amendment sought to pending income tax bill*. Real Estate Mag., May, 1913. Pp. 6.

CONANT, C. A. *The return to hard money*. Century, July, 1913. Pp. 18.
The finances of the Civil War.

COX, H. *The Lloyd Georgian land taxes*. Edinb. Rev., Aug., 1913. Pp. 21.

A hostile criticism of the land tax introduced by the budget of 1909.

DEPUICHAULT, R. *Le budget de la guerre à la douma*. Rev. Pol. et Parl., July 10, 1913. Pp. 6.

DULONG, H. *La dette ottomane et les états balkaniques*. Rev. Intern. du Com., June, 1913. Pp. 16.

Turkey first succeeded in raising a foreign loan after the Crimean War in 1854. By 1875 nearly all her revenues were being absorbed by the debt service, and from that time on Turkey, though still negotiating foreign loans, disregarded her obligations at will, driving foreign bondholders to organize in self-protection. Historical data are drawn from L. Depüis, *Le controle financier de la dette publique ottomane* (Paris, 1908). The credit of the Ottoman Empire at present depends on the extent to which the Balkan states are compelled to share the Turkish debt. 80 per cent of Turkish securities are in the hands of French investors.

ESCHWEGE, L. *Aus der Praxis des privaten Taxwesens*. Die Bank, July, 1913. Pp. 7.

Points out the ill effects of clumsy and inexact methods of valuation of real estate.

EULAMPIO, M. S. *The history and finances of modern Greece*. Economist, Sept. 20, 1913. P. 1.

A letter to the editor of the "Economist" explaining the financial difficulties of Greece.

EVANS, J. *Capital and income under the income tax act*. Law. Quart. Rev., Apr., 1913. Pp. 16.

GERLOFF, W. *Die Wertzuwachssteuer in Literatur und Gesetzgebung*. Schmollers Jahrb., No. 3, 1913. Pp. 13.

A critical survey of the literature of the unearned increment tax, covering 17 titles published since 1909.

GIPFEL, M. *Die portugiesischen Anleihen*. Jahrb. f. Nat. Oek., Aug., 1913. Pp. 12.

The finances of Portugal, with special reference to the experience of German investors with Portuguese government securities, from the first of the four bankruptcies in 1826 to the existing republic.

GONACHOU, A. *Suppression des droits de mutation sur les legs et libéralités fait aux établissements charitables*. Rev. Philan., July, 1913. Pp. 10.

Gifts to charitable institutions, such as hospitals, are subject to an inheritance tax. This article reviews the case in favor of their exemption.

GOODNOW, F. J. *Congressional regulation of state taxation*. Pol. Sci. Quart., Sept., 1913. Pp. 28.

Multiple taxation of the same property by different states has become so great an evil that the United States Supreme Court has come to consider such action as a taking of property without due process of law. Professor Goodnow makes the interesting suggestion that, in view of the difficulty of avoiding double taxation by means of voluntary coöperation among the states, Congress might by statute define what sort of state taxes constitute a taking of property without due process of law, basing such a statute on the fifth section of the

fourteenth amendment, which gives Congress "power to enforce, by appropriate legislation, the provisions of this article."

GRUNWALD, P. *Aufgaben und Mittel der staatlichen Verwaltung der direkten Steuern in Österreich*. Zeitschr. f. Volkswirtsch., XXII, 2-3, 4-5, 1913. Pp. 143.

These two articles represent an expanded form of lectures delivered for the Independent League for Economic Education in Brünn and Vienna in the autumn of 1912.

GUYOT, Y. *Le budget de 1913 en France*. Rev. Econ. Intern., July, 1913. Pp. 30.

HAUSSER, G. *Les finances brésiliennes*. Rev. Econ. Intern., June, 1913. Pp. 23.

HENNESSY, C. O. *Home rule in taxation*. Am. City, Aug., 1913. Pp. 2.

A letter to the editor in support of exemption of improvements.

HUART, A. *Le problème budgétaire et l'expansion des forces économiques de la France*. Rev. Econ. Intern., July, 1913. Pp. 32.

AN ITALIAN CORRESPONDENT. *Italian finance*. Economist, Sept. 20, 1913. P. 1.

JEZE, G. *La loi anglaise sur le recouvrement provisoire des impôts*. Rev. Sci. Legis. Finan., Apr.-May-June, 1913. Pp. 24.

Although the English fiscal year begins April 1st, it has not been customary for Parliament to give full legal sanction to the income tax until several months have elapsed. In the meantime, acting under the authority of a resolution by the Committee of Ways and Means of the House of Commons, the fiscal agents have proceeded to levy and collect the tax. In 1912, however, Mr. Gibson Bowles succeeded in obtaining a judicial decision restraining the Bank of England from collecting the income tax before the tax was regularly voted by Parliament. This made necessary the Provisional Collection of Taxes Act of 1913, which gives statutory effect to the resolution of the Committee of Ways and Means.

JEZE, G. *Le projets financiers du gouvernement pour couvrir les dépenses militaires*. Rev. Sci. Legis. Finan., Apr.-May-June, 1913. Pp. 14.

Discussion of proposals for solving the difficult problem of meeting the heavy expenditures caused by the present Franco-German rivalry.

KOUSTAM, E. M. *Land values taxation; a criticism of the evidence before the parliamentary committee on imperial and local taxation*. Transactions of Surveyor's Inst., session of 1912-1913. Pp. 42.

LADON. *Zuwachsteuern*. Zunkunft, July 5, 1913. Pp. 4.

LANSBURGH, A. *Der Staat und die Auslandsanleihen*. Die Bank, July, 1913. Pp. 15.

The question of allowing German capital to flow into foreign investment channels to the detriment of the market for German government securities.

LEROY-BEAULIEU, P. *Les plus-values d'impôts*. L'Econ. Franç., Sept. 13, 1913. Pp. 2.

At the present rate the tax revenues of France for the current year will exceed calculation by 230 millions of francs.

LEROY-BEAULIEU, P. *Les projets financiers en vue*. L'Econ. Franç., Aug. 16, 1913. Pp. 3.

LEROY-BEAULIEU, P. *La revision des cours des valeurs mobilières*. L'Econ. Franç., June 14, 1913. Pp. 3.

A search for the causes of the world-wide depression in security markets. Among the principal causes found are: strained international relations, administrative mismanagement, and confiscation of private wealth by taxation instead of borrowing. The first article, devoted to government securities, reviews the history and present state of the interest rate on government securities for the principal countries of the world.

LEROY-BEAULIEU, P. *La situation financière: les sophismes de M. Caillaux*. L'Econ. Franç., Aug. 2, 9, 16, 1913. Pp. 2, 3, 3.

An attack on M. Caillaux based chiefly on his advocacy of an income tax. The second article discusses M. Caillaux's "bluff," which was his estimate that 800 million francs new revenue would be needed for the 1914 budget. That amount could be reduced by half, says M. Leroy-Beaulieu, by simply eliminating waste.

LEVY, G. *Les armements financiers de la France et de l'Allemagne*. Rev. Deux Mondes, July 15, 1913.

MACLER, M. *Rapport au sénat sur le budget des postes et télégraphes*. Journ. des Econ., July, 1913. Pp. 11.

Quotes at length parts of the report comparing the French with the German, Swiss, and English postal service, showing the general inferiority of the French system. Inferior service, demoralized personnel and crude financial methods all inhere, M. Macler holds, in government enterprises.

MAITUP. *La première session de la commission financière balkanique*. Journ. des Econ., Aug. 15, 1913. Pp. 12.

Was occupied with the problem of protecting creditors of Turkey, Serbia, Bulgaria, and Greece by an equitable distribution of the cost of the war and the pre-existing Turkish debt.

LE MARQUIS DE MIRABEAU. *Bref état des moyens pour la restauration de l'autorité du roi et de ses finances, avec des notes de François Quesnay; publié par G. Weulersse*. Rev. d'Hist. Econ., No. 2, 1913.

An hitherto unpublished manuscript from the pen of the founder of the Physiocratic school, apparently written between 1757 and 1760. It furnishes to students of economic thought, among other things, an epitome of the theory of *produit net* and an argument against consumption taxes.

MEANT, W. J. *Railway taxation*. Ry. World, Aug., 1913. Pp. 2.

Dwells at length on the increase of railway taxation in proportion to gross and net revenue, the railways at the same time being forbidden to increase their rates. Suggests that railroad managers would welcome

taxation by some national board working in harmony with the Interstate Commerce Commission.

MEISSINGER, H. *Die Gebühren des kommunalen Haushalts, mit besonderer Berücksichtigung Hessens.* Finanz-Archiv, No. 2, 1913. Pp. 73.

Discusses in a general way the fundamental legal relations between state and municipality and the financial powers of the latter, with a history of the development of the *Finanzgewalt* in Hesse. The principal feature of this article (to be continued) is an elaborate definition of the fee and the place of fees in Hessian municipal finance.

MELTZING, O. *Die Wirkung der neuen Steuervorlagen auf die deutsche Privatversicherung.* Oesterr. Zeitschr. f. öffentliche und private Versicherung, IV, No. 1, 1913. Pp. 14.

MONEY, L. G. C. *Social legislation and the usury obsession.* New Statesman, Aug. 30, 1913. Pp. 2.

Advocates paying for certain social improvements (houses for the poor) by taxation rather than by borrowing, on the ground that the interest on the loans would impose a hardship on the "poor working man."

MOORE, C. S. *The super tax.* Law Quart. Rev., Jan., 1913. Pp. 11.

MUZET, A. *La serbie au lendemain de la guerre.* Journ. des Econ., Sept. 1913. Pp. 6.

Opinions of a first-hand observer as to the effect of the Balkan war on Servia's financial condition.

OUTHWAITE, R. L. *Cities as farm centres! How urban land escapes the rates.* Land Values, Aug., 1913. Pp. 2.

A review of a parliamentary report showing the extent to which land is held idle and escapes taxation in the populous urban centers of England. An argument for rating reform.

PARKER, G. *Land reform and the chancellor.* Nineteenth Cent., Aug., 1913. Pp. 10.

Opposed to the land policy of Lloyd George.

VON POZZI, V. R. *Ueber die Ursachen der hohen italienischen Rentenkurse.* Zeitschr. f. Volkswirtschaft., XXII, No. 3-4. Pp. 8.

Seeks an explanation for the remarkable fact that Italian government securities have not declined in spite of war and other untoward conditions.

RADUSCH, A. *Zur Beurteilung der Höhe der Postüberschüsse und ihrer Verwendung.* Finanz-Archiv, No. 2, 1913. Pp. 60.

In Germany, as in the United States, the question has been raised as to whether the post office really pays its way. This article aims to show that the German post office earns a real net surplus, and discusses many of the more intricate details of financial administration.

RAUDNITZ, J. *Die Entwicklung der serbischen Staatsfinanzen.* Finanz-Archiv, No. 2, 1913. Pp. 46.

In spite of the widespread interest in the affairs of Servia, no de-

tailed and first-hand study of her finances has hitherto been published. This study, the result of original investigation, treats of the sources of income, objects of expenditures, etc. Expenditures grew from 78,000,000 m. in 1902 to 114,648,700 m. in 1911.

RAUDNITZ, J. *Die Staatswirtschaftliche Entwicklung Bulgariens*. Zeitschr. f. Volkswirtsch., XXII, No. 3-4. Pp. 33.

A survey of Bulgarian finance, covering the tax system; sources of non-tax revenue, expenditure, and debt.

REED, R. R. *Analysis of the amended income tax bill*. Trust Companies, Aug., 1913. Pp. 3.

"Features of application in which trust companies and investors are especially interested."

ROBERTSON, M. *An interesting budget statement*. Contemp. Rev., Sept., 1913. Pp. 11.

ROOT, C. T. *Not a single tax!* Am. City, July, 1913. Pp. 3.

A brief exposition of the single tax philosophy.

ROTTACH, E. *Les finances de la république chinoise*. Rev. Pol. et Parl., June, 1913. Pp. 16.

ROUME, E. *De la nécessité de l'emprunt de l'Afrique équatoriale française*. Rev. Pol. et Parl., July, 1913. Pp. 18.

VON SCHANZ, G. *Die bayerische Schuldentilgungspolitik*. Finanz Archiv, No. 2, 1913. Pp. 15.

A thorough analysis of the Bavarian public debt and the policy of debt payment. The net debt has been increasing rapidly since 1902.

SCHWARZ, O. *Die Finanzen der europäischen und der wichtigeren aussereuropäischen Staaten*. Finanz-Archiv, No. 2, 1913. Pp. 114.

A review covering 1911 and 1912 so far as the data are available.

SEIGER, F. *Bibliographie der finanzwissenschaftlichen Literatur für das Jahr 1912 (mit Ausschluss des Zollwesens)*. Finanz Archiv, No. 2, 1913. Pp. 21.

Reasonably complete for German states, but for England and especially for the United States is of no value at all.

SIEBERT, A. *Ueber Erwerbseinkünfte in Einnahmesystem des Grossherzogtums Baden*. Zeitschr. f. d. ges. Staatsw., No. 2, 1913. Pp. 22.

Nearly 10 per cent of the net revenue of Baden is derived from industrial undertakings of one sort or another, including forests, domains, salt works, state brewery, etc. Taxation having reached its practical limits, new and urgent wants must be met by increasing this class of revenues.

SMITH, H. *Die Steuerreform in Dänemark in 1911-1912*. Finanz-Archiv, No. 2, 1913. Pp. 13.

Denmark, in common with most other countries of western Europe, has in recent years secured notable tax reforms. In 1903 a radical reform in direct taxes, and in 1908 tariff and excise taxes. These reforms, however, so reduced the revenues that it was necessary both to reduce expenditure and to seek new sources of revenue. An "economy"

committee found a way of reducing the budget and by various new indirect taxes and increased rates for the direct an increase of 21 per cent was realized in two years.

STAMP, J. C. *Incidence of increment duties.* Econ. Journ., June, 1913. Pp. 12.

An examination of conflicting opinions in regard to the extent to which increment taxes to be levied in the future fall on present owners. Concludes that a tax on true increment, or windfall, is hardly "shiftable" at all.

STREET, A. L. H. *Some legal aspects of the sale of municipal bonds.* Am. City, July, 1913. Pp. 2.

SZTERENYI, J. *Die ungarische Industriepolitik.* Zeitschr. f. Volkswirtsch., XXII, No. 2-3, 1913. Pp. 40.

TREVISONNO, N. *Per un sistema d'imposte sul reddito consumato.* Giorn. d. Econ., Sept., 1913. Pp. 18.

VIRTUE, G. O. *Mortgage taxation in Nebraska.* Quart. Journ. Econ., Aug., 1913. Pp. 4.

Takes up some of the complications produced by an act of 1911, making mortgages an interest in the land and taxable to the mortgagee, the mortgagor being permitted to assume the whole burden. Difficulties have arisen in regard to mortgages held by state banks.

WECK. *Die Beweglichkeit der Gemeindegrundsteuer in Preussen.* Finanz-Archiv, No. 2, 1913. Pp. 11.

WEDGWOOD, J. G. *Principle of land value taxation.* Econ. Journ., Sept., 1913. Pp. 10.

A reply to the article by C. F. Bickerdike in the March number of the "Economic Journal" (cf. REVIEW, vol. II, no. 4, p. 977). The author is a member of Parliament who favors the taxation of land values not as a prosperity policy, but as a corrective of injustice.

WYNNE-ROBERTS, R. O. *The financing of municipal works. Comparison of Canadian, British and South African methods.* Canad. Engr., Aug. 14, 1913. Pp. 3.

The finances of Japan. Economist, Sept. 6, 1913. P. 1.

"If Japanese credit is to be restored, a policy of retrenchment must be seriously pursued, and the burden of the national debt lightened with all speed."

Real estate and the income tax. Real Estate Mag., June, 1913. Pp. 3.

Real estate interests throughout the country protest against the stoppage-at-the-source method of collecting the income tax.

A report on the constitutionality of exempting securities from taxation, on taxing them at a lower rate than tangible property in the various states. Bull. Invest. Bankers Assn. of Am., Aug. 29, 1913. Pp. 38.

Gives the constitutional provisions directly affecting the classification of property for taxation for every state, except Arizona and New Mexico, with citation of court decisions interpreting them. Provisions relating to exemption are also given for the reason that by a general

rule of interpretation specific exemptions preclude the legislature from making other exemptions.

The single tax. Outlook, Sept. 20, 1913. Pp. 3.

A review of the world-wide movement toward exempting improvements and increasing the tax on land values.

Application des règles budgétaires. Rev. Sci. Legis. Finan., Apr.-May-June, 1913. Pp. 16.

Le budget de la ville [de Paris] pour l'exercice 1913. Bull. Stat. Legis. Comparée, Apr., 1913. Pp. 4.

China's reorganization loan. A brief history of the negotiations. Far Eastern Rev., May, 1913. Pp. 8.

Les contrôles budgétaires. Rev. Sci. Legis. Finan., Apr.-May-June, 1913. Pp. 16.

Points out the inefficiency of the present machinery, including the *cour des comptes*, for preventing irregularities in execution of the budget, particularly the payment of money without the sanction required by law. The whole system of the budgetary control is declared to be a sham.

Le dépenses militaires de la France depuis, 1870. Bull. d. Stat. Legis. Comparée, May, 1913. Pp. 2.

Gives table of expenditures on army, navy, and pensions each year since 1870.

La dette publique ottomane et les états Balkaniques. Mouv. Econ., June 1, 1913. Pp. 4.

L'exploitation du monopole des tabacs. L'Econ. Franç., Aug. 9, 1913. Pp. 3.

Les impôts et revenus de l'état depuis 1871. Bull. Stat. Legis. Comparée, Mar., 1913, Pp. 7.

A valuable statistical compilation.

Les monopoles fiscaux et le principe de l'indemnité. Rev. Sci. Legis. Finan., Apr.-May-June, 1910. Pp. 7.

The suggestion of new fiscal monopolies to meet increasing expenditures brings up the question of indemnifying persons financially injured thereby. M. Klotz, minister of finance, holds that the state would be under obligation to pay such an indemnity.

La situation financière des communes en 1912. Bull. Stat. Legis. Comparée, May, 1913. Pp. 15.

Tariffs and Reciprocity

(Abstracts by Henry R. Mussey)

BENZACAR, J. *Ligue du libre-échange: conférence du 14 avril: le coût de la vie et le protectionnisme.* Rev. Econ. Bordeaux, Apr.-May, 1913. Pp. 18.

The ordinary argument of the orthodox French free-trader that protection has increased the cost of living. Illustrated by several diagrams.

FORSTMANN, J. *Statement regarding new Underwood tariff bill with special reference to schedule K.* Bull. Nat. Assoc. Wool Mfrs., June, 1913. Pp. 15.

A rather bitter complaint against the Underwood bill, which is assailed with the arguments ordinarily current among the woolen manufacturers.

HOLLANDER, J. W. *Der deutsche Zolltarif von 1902.* Schmollers Jahrb., No. 3, 1913. Pp. 66.

The conclusion of a detailed study of the passage of the German tariff of 1902, giving its legislative history.

JONES, J. H. *Dumping and the tinplate industry.* Econ. Journ., June, 1913. Pp. 12.

Dumping furnished an incentive to the formation of the Siemens Bar Association, but did not cause its success. It thus hastened integration and helped change the organization of the bar and plate industries. There is a possibility of control of tinplate prices in future.

MAGNAN, L.-J. *La France et la révision du tarif américain.* Rev. Intern. du Com., June, 1913. Pp. 14.

A review of American policy as affecting France. Considers the Underwood bill as conceived in our traditional spirit of protection. France suffers especially as her exports to us are mostly luxuries. Retaliation, nevertheless, is impossible.

MARVIN, W. L. *A radical revision downward. The woolen schedule of the Underwood bill a grave menace to the industry.* Bull. Nat. Assoc. Wool Mfrs., June, 1913. Pp. 4.

A note of warning from the secretary of the National Association of Wool Manufacturers.

PAGE, T. W. *The tariff and the woolen industry.* Bull. Nat. Assoc. Wool Mfrs., June, 1913. Pp. 15.

A careful and judicial review of the progress of the woolen industry, and a consideration of the reasons for our inferiority in that branch of manufacture. Economically, the industry is a failure. Is it worth while otherwise?

The new tariff in House and Senate. Bull. Nat. Assoc. Wool Mfrs., June, 1913. Pp. 48.

A history of the Underwood bill up to the end of May, with special reference to the wool and woollens schedule. Gives the arguments of the woolen men against the bill.

Insurance and Pensions

AUDINET, E. *Le monopole des assurances sur le vie en Italie et le droit des étrangers.* Rev. Droit Intern. Public., 1913. Pp. 18.

BAUM-DUESSELDORF, M. *Mutter- und kinderschutz in der Reichsversicherungsordnung.* Soziale Praxis, Sept. 4, 1913. Pp. 33.

BELLOM, M. *La loi anglaise d'assurance sociale de 1911.* Journ. des Econ., June, 1913. Pp. 19.

- BELLOM, M. *Les premiers résultats de la nouvelle loi anglaise d'assurance sociale. I. II.* Journ. des Econ., Aug. 15, Sept. 15, 1913. Pp. 14.
- BRANDT. *Der Ersatz der Kosten des Heilverfahrens.* Zeitschr. f. d. ges. Versicherungswis., Sept., 1913. Pp. 3.
- CUNNISON, J. *The incidence of national insurance contributions.* Econ. Journ., Sept., 1913. Pp. 7.
- DEVINE, E. T. *Pensions for mothers.* Survey, July 5, 1913. Pp. 4.
- DOERSTLING, *Die Versicherungspflicht im Privatrecht. I.* Zeitschr. f. d. ges. Versicherungswis., Sept., 1913. Pp. 24.
- HALSTEAD, A. *Medical benefits of British insurance act.* Daily Cons. & Trade Rpts., July 8, 1913. Pp. 2.
- HOECKNER. *Nettokosten und Kostenvergleichen in der Lebensversicherung.* Zeitschr. f. d. ges. Versicherungswis., July, 1913. Pp. 13.
- HUNTER, A. *The medico-actuarial investigation of the mortality of American and Canadian life assurance companies.* Journ. Inst. Actuaries, July, 1913.
- HUTH, G. *Die Grundzüge der britischen Nationalversicherung von 1911.* Schmollers Jahrb., No. 2, 1913. Pp. 14.
- KIRCHMANN. *Wesen und Wirkung der unwiderruflichen Bezugsberechtigung beim Lebensversicherungsvertrag.* Zeitschr. f. d. ges. Versicherungswis., July, 1913. Pp. 11.
- LODGE, W. *A pension plan for employees in the machinery trades.* Ind. Engg., July, 1913.
- MANER, A. *Die internationalen Verflechtungen des Versicherungswessens. Ein Ueberblick.* Weltwirtsch. Archiv, July, 1913.
- MONDET, N. *Résultats des assurances sociales en Allemagne.* Journ. des Econ., July, 1913.
- MONEY, L. G. C. *National insurance and labour unrest.* Fortn. Rev., Oct., 1913.
- RENFER. *Die Reserven der Aktiengesellschaften für Sachversicherung. I.* Zeitschr. f. d. ges. Versicherungswis., Sept., 1913. Pp. 37.
- RUBINOW, I. M. *Accident compensation for federal employees.* Survey, Aug. 16, 1913.
- STIER SOMLO, S. *Social insurance of agricultural labourers against sickness.* Mo. Bull. Econ. & Soc. Intelligence, July, 1913. Pp. 15.
- ULRICH. *Ein Beitrag zur analytischen Ausgleichung von Sterbetafeln.* Zeitschr. f. d. ges. Versicherungswis., Sept., 1913. Pp. 21.
- WILLIAMS, F. *Insurance that prevents fire.* Wlds. Wk., Oct., 1913.
- Life insurance and legislation on small holdings and cheap dwelling houses.* Mo. Bull. Econ. & Soc. Intelligence, Aug., 1913. Pp. 9.
- National insurance and national character.* Edinburgh Rev., Aug., 1913.
- Social insurance.* Am. Labor Legis. Rev., June, 1913. Pp. 131.

Contains proceedings of first American Conference on Social Insurance held in June, 1913. Among the papers published are: "Sickness insurance," by I. M. Rubinow; "Insurance against unemployment," by C. R. Henderson; "Pensions for mothers," by E. T. Devine; "Old age insurance," by F. S. Baldwin; "Systems of wage-earners' insurance," by F. L. Hoffman. Various aspects of workmen's compensation are discussed by T. J. Duffy, P. T. Sherman, and Miles Dawson. There is also a 6-page bibliography on social insurance.

Les opérations de 1912 concernant la loi sur les retraites ouvrières. L'Econ. Franç., Aug. 23, 1913. Pp. 2.

Population and Migration

(Abstracts by William B. Bailey)

ACKLAND, T. G. *On the estimated age-distribution of the Indian population, as recorded at the census of 1911, and the estimated rates of mortality, deduced from a comparison of the census returns for 1901 and 1911.* Journ. Inst. Actuaries, July, 1913. Pp. 100.

A valuable article, showing the method by which the age curve of the Indian population was smoothed, and an attempt made to form a life table for the population of those provinces.

BERTILLON, J. *Occupational mortality and causes of death.* Quart. Pubs. Am. Stat. Assoc., June, 1913. Pp. 9.

The translation of the introduction to the address at the International Congress on Hygiene and Demography dealing almost entirely with the difficulties attending a study of mortality and the causes of death by occupations.

CLARK, V. S. *"Gresham's Law" as applied to immigration to Hawaii.* Quart. Pubs. Am. Stat. Assoc., June, 1913. Pp. 3.

It appears from a study of the European and Asiatic men competing in the labor market of Hawaii from 1905 to 1912 inclusive, that, as the number of Asiatic men increased by immigration, the departures of Spanish and Portuguese men for California increased.

DAURE, L. *Le Néo-Malthusisme: ses effets, sa propagande.* Mouvement Social, June, 1913. Pp. 20.

A partial statement of the recent Neo-Malthusian literature, a short summary of the practices to prevent conception, together with infanticide, and a review of the various schemes proposed to increase the size of families in France. The author feels that religion and the Catholic church are the only forces which will accomplish this end.

DIX, A. *Auswanderung und Wanderarbeit. Materialien zur internationalen Wanderungsbewegung.* Weltwirtsch. Archiv, July, 1913. Pp. 16.

Possesses considerable interest in that it gives the official statistics of emigrants and immigrants from and to the principal countries of the world.

DUDFIELD, R. *On the increase of mortality from "injury at birth."* Journ. Royal Statist. Soc., July, 1913. Pp. 2.

Since 1891 the deaths due to injury at birth have increased from 50 to 846 in 1910. Part of this statistical increase seems to be due to a change in classification about the beginning of the twentieth century.

ELBERTON, W. P. *Some recent statistical results.* Journ. Inst. Actuaries, Apr., 1912. Pp. 30.

A discussion of the ability of life insurance companies through their records to contribute to our knowledge of heredity. Included in the study is a bibliography of recent writings in England upon parental resemblance and size of families.

FOERSTER, R. F. *Hourwich's "Immigration and Labor."* Quart. Journ. Econ., Aug., 1913. Pp. 15.

A critical review of the recent volume by Dr. Hourwich, taking particular exception to the theory advanced by the author with reference to the relation of immigration to labor.

LEROY-BEAULIEU, P. *L'émigration européenne et l'immigration dans les pays neufs au cours des dernières années.* L'Econ. Franç., June 28, July 5, 12, 1913. Pp. 6.

In the first of the issues is treated the emigration from the different countries of Europe; in the second, the immigration into the principal countries of America and Oceania; while in the third is discussed the probability that the Old World can continue to send forth the same number of emigrants from year to year and that the New World can continue to receive them.

LEROY-BEAULIEU, P. *La question de la population en France.* Acad. des Sciences Morales Polit., Apr., 1913.

MILLIS, H. A. *California and the Japanese.* Survey, June 7, 1913. Pp. 5.

The reasons for the enactment of the recent anti-alien land bill in California. This was the result of a fear that the Japanese would undersell the native-born Californians in farm produce. The legislation was unjust, unnecessary, and highly impolitic.

OERTEL, H. *The inaccuracy of American mortality statistics.* Am. Underwriter, May, 1913. Pp. 6.

Grave doubt is cast upon the accuracy of American mortality statistics. It is felt that clinical diagnosis is not supported in a sufficient number of cases by objective microscopic evidence or autopsy findings.

PARADISE, V. *The Jewish immigrant girl in Chicago.* Survey, Sept. 20, 1913. Pp. 6.

A sympathetic study of the problem confronting the Jewish immigrant girl upon her arrival in Chicago. The difficulty of earning a decent living is discussed in particular.

REED, A. C. *Immigration and the public health.* Pop. Sci. Mo., Oct., 1913. Pp. 25.

The activity of the health officials at Ellis Island in particular in endeavoring to stop the emigration of diseased aliens. Particular attention is given to such diseases as trachoma, with its effects upon public health.

ROSENBAUM, E. *Klimaschwankungen und Völkerwanderungen*. Weltwirtsch. Archiv, July, 1913. Pp. 7.

A study of the effect of the changes in climate and temperature upon the volume of migration. A period of poor harvest generally leads to an increased emigration from a country. As an increasing proportion of a population gets a living from some other source than agriculture, the influence of climate decreases.

DE THIOLLAZ, M. E. *Repopulation et colonisation*. Réf. Soc., June 16, 1913. Pp. 22.

The effect of the law of primogeniture in France upon the growth of population. The author proposes the formation of a company to loan money upon the security of real estate in order to make it possible for the younger members of a family to purchase property in the French colonies in North America.

THORNDIKE, E. L. *Eugenics with special reference to intellect and character*. Pop. Sci. Mo., Aug., 1913. Pp. 14.

A helpful article to the effect that intellect and character may be improved by proper mating; that there seems to be a connection between intellect and morality; and that by selected breeding it is probable that the innate faculties of men may be improved.

Report of the special committee on morbidity and mortality statistics in the United Kingdom. Journ. Royal Statist. Soc., July, 1913. Pp. 21.

Most of the article consists of a pains-taking bibliography of the official and non-official publications dealing with this subject, which have appeared in England during the past four decades.

La crise de la natalité en Belgique, depuis 1901. Rev. Soc. Catholique, Apr., 1913.

Les statistiques concernant la femme dans les Etats de l'Union Nord Américaine. Journ. Soc. Statist., June, 1913.

Geburtenrückgang. Politisch-anthropologische Rev., Apr., 1913.

Pauperism and Charities

(Abstracts by Frank D. Watson)

BARKER, J. E. *Great Britain's poverty and its causes*. Fortn. Rev., Aug., 1913.

Approximately 30 per cent of the British population live on the verge of hunger; the cause of their poverty is insufficient production. Free trade has created influences unfavorable to industrial efficiency.

DE BELLEGARDE, P. *Les dépenses administratives de l'assistance publique*. Rev. Philan., May, 1913. Pp. 5.

Defends the administrative expenses of public charity.

CARR-SAUNDERS, A. M. *The feeding and medical treatment of school children*. Econ. Journ., Sept., 1913.

An attempt to discern whether relief outside the poor law is ever justified in the form of free meals and medical treatment. Concludes in reference to the latter that "probably the most satisfactory course

would be to make it free to all children attending elementary schools"; and in reference to the provision of free meals, that in certain selected cases a system of free provision of meals should be followed "in consideration of the good which it undoubtedly does." "The system must not be administered so as to become permanent."

DARLU, P. *L'assistance obligatoire aux familles nombreuses indigentes*. Rev. Pol. et Parl., Apr., 1913. Pp. 14.

Discusses law passed by the Chamber and now before the Senate, granting assistance to all poor families having more than three children under thirteen, and to all widows having more than two children under thirteen.

FAVIERE, A. *Le rôle social de la charité*. Rev. Cathol. des Instit., Jan., 1913.

MAHONEY, W. H. *Benevolent hospitals in metropolitan Boston*. Quart. Pubs. Am. Statist. Assoc., June, 1913.

Beginning with the establishment in 1821 of the Massachusetts General Hospital, the first hospital to care for the indigent sick of Boston, the article discusses the development of the hospital system of Boston to the present day. Statistical data are included.

ROGERS, F. C. *Outdoor relief*. Econ. Rev., Apr., 1913.

VAN OVERBERGH, C. *Le régime legal de la bienfaisance privée en Belgique*. Réf. Soc., Sept. 1, 1913. Pp. 2.

Discusses the liberty and encouragement given to private benevolence under the constitution in Belgium.

L'organisation de la bienfaisance privée et le contrôle des établissements libres. La liberté de la bienfaisance et des fondations charitables. Réf. Soc., Aug. 1, 1913. Pp. 21.

Discusses state control as opposed to private initiative in charity, urging freedom for the latter.

Le pécule-salaire dans les établissements de bienfaisance privée. Réf. Soc., Aug. 1, 1913. Pp. 49-52.

Discusses the system of wage-savings voted on by the Chamber of Deputies last July.

Socialism

BRAUN, H. *August Bebel als Sozialpolitiker*. Ann. f. Soz. Pol. u. Gesetz., III, 1-2, 1913. Pp. 19.

CARVER, T. N. *The trend toward socialism*. Independent, July 31, 1913.

CLARK, H. W. *The prospects of religion under socialism*. Nineteenth Cent., Aug., 1913.

CZOBEL, E. *Zur Verbreitung der Worte "Sozialist" und "Sozialismus" in Deutschland und in Ungarn*. Archiv f. d. Gesch. Soz., III, 3, 1913.

HANEY, L. H. *Der Einfluss des Sozialismus auf die Volkswirtschaftslehre*. Archiv f. d. Gesch. Soz., III, 3, 1913. Pp. 17.

HARRIS, N. *Coöperation: what it is, and its possibilities*. Charity Organ. Rev., June, 1913. Pp. 23.

- LOUIS, P. *Le socialisme de 1848*. Rev. Bleue, March 22, 1913.
- MAYER, G. *Der Untergang der "Deutsch-französischen Jahrbücher" und des Pariser "Vorwärts."* Archiv f. d. Gesch. Soz., III, 3, 1913. Pp. 22.
- SCHMIDT, F. J. *Hegel und Marx*. Preuss. Jahrb., March, 1913.
- SOMERVILLE, H. *English socialism of to-day*. Mouv. Social, July 15, 1913.
- STANTON, T. *State ownership in France*. N. Am. Rev., Aug., 1913.
- THOMPSON, C. D. *The vital points in charter making from a socialist point of view*. Nat. Munic. Rev., July, 1913. Pp. 11.

Housing

(Abstracts by James Ford)

- ALLEN, J. G. *Rise in the cost of building*. Garden Cities & Town Planning, Sept., 1913. Pp. 3.
- Shows increase in cost of building materials in past two years.
- COCHRANE, C. *Rural housing and state grants*. Contemp. Rev., Aug., 1913. Pp. 7.
- A good brief review of the English rural housing problems. Argues against local and state subsidization and for higher wages to agricultural labour through relieving farmer of certain tax burdens.
- EBERSTADT. *Problems of town development*. Garden Cities & Town Planning, Aug., 1913. Pp. 5.
- Comparison of housing and town planning problems and methods in Germany and England.
- EDWARDS, A. T. *A criticism of the garden city movement*. Town Planning Rev., July, 1913. Pp. 8.
- FELS, J. *Taxation, housing, and town planning*. Landscape Architecture, Oct., 1913. Pp. 12.
- Taxation of land values to increase amount of land available for housing the working class.
- FORCHHEIMER, K. *Die neue wohnungspolitische Gesetzgebung Oesterreichs*. Archiv f. Sozialwis., Mar., 1913. Pp. 20.
- INGRAM, A. E. *English conference on housing and town planning*. Daily Cons. & Trade Rpts., July 17, 1913. Pp. 4.
- Special consideration of promotion of cottage housing.
- KUCZYNSKI, R. *Zur Kritik des Wohnungsgesetzentwurfs*. Ann. f. Soz. Pol. u. Gesetz., III, 1-2, 1913. Pp. 70.
- Highly detailed comparison of the Prussian housing bills of 1904 and 1913. General criticism.
- MILLER, G. H. *Fairfield, a town with a purpose*. Am. City, Sept., 1913. Pp. 6.
- Describes zoning system and building types of an industrial suburb.
- NETTLEFORD, J. S. *Hereford garden suburb. The value of coöperation*. Town Planning Rev., July, 1913. Pp. 5.
- ROSCHER, H. *Zur Wohnungsfrage*. Preussische Jahrb., Oct. 1913. Pp. 8.

Advocates reduced stringency in building legislation, as practiced in Hamburg, furthering erection by private capital of 2-3 room tenements.

THOMPSON, W. *The Ruislip-Northwood and Ruislip-manor joint town planning scheme*. Town Planning Rev., July, 1913. Pp. 12.

VEILLER, L. *How to work for housing reform*. Am. City, Sept., 1913. Pp. 4.

WHETHAM, W. C. D. and C. D. *Agriculture labour and rural housing*. Edinb. Rev., Aug., 1913. Pp. 21.

Urges landlords to reduce rents of farmer tenants upon their agreement to pay the amount in extra wages to their laborers; the latter shall rent cottages from landlord direct at a price which will make new construction possible.

Housing administration in 1912-13. Munic. Journ., Aug. 29, 1913. Pp. 3.

Excellent summary of housing schemes under English acts for year ending March 31, 1913.

Town Planning in 1912-13. Munic. Journ., Sept. 5, 1913. Pp. 3.

Summary of municipal housing under English Town Planning Act of 1909.

A Welsh housing trust. Garden Cities & Town Planning, July, 1913. Pp. 3.

Describes a limited dividend company, formed to acquire land and to promote coöperative building.

Statistics

(Abstracts by A. A. Young)

BOREL, E. *Considérations statistiques sur le taux de l'intérêt*. Journ. Soc. Statist., June, 1913. Pp. 10.

DUDFIELD, R. *Report of the special committee on morbidity and mortality statistics in the United Kingdom*. Journ. Royal Statist. Soc., July, 1913. Pp. 21.

A very complete bibliography of the subject.

DUGE DE BERNONVILLE, L. *Distribution de salaires et de revenus en divers pays*. Bull. Stat. Gén., July, 1913. Pp. 37.

A valuable study, utilizing wage statistics from Belgium, Great Britain, Italy, Germany, United States (Dewey report), and Massachusetts; income statistics from Prussia, Saxony, Austria, Denmark, and Norway. The dispersion of wages and incomes is shown by the use of averages, medians, and quartiles.

FUSTER, E. *Statistique internationale de l'invalidité*. Journ. Soc. Statist., Aug.-Sept., 1913. Pp. 44.

The best account and summary of the information available on this important topic yet published.

HUBER, M. *Les statistiques de la production industrielle*. Journ. Soc. Statist., July, 1913. Pp. 31.

A valuable article. Gives special attention to the methods and results of the recent English census of production, but also summarizes the work of other countries.

KELLER, O. *Accroissement de la production minérale et métallurgique du globe en l'espace de trente ans (1861-1890)*. Journ. Soc. Statist, Mar., 1913. Pp. 15.

A compilation, based upon the official *Statistique de l'Industrie minérale*.

MILLIET, E. W. *International statistics of the consumption of alcohol*. Quart. Pubs. Am. Stat. Assoc., June, 1913. Pp. 8.

Part of a report to the International Committee for the Scientific Study of the Alcohol Question.

NIXON, J. W. *An experimental test of the normal law of error*. Journ. Royal Statist. Soc., June, 1913. Pp. 5.

A study of the occurrence of the various digits in the seventh place of 10,000 logarithms, the digits being summed in various ways. The purpose is to "show how aggregates of quantities which conform to scientific law may yet exhibit signs of fortuitousness as tested by the normal curve of error.

DE PISSARGEVSKY, DE L. *Les statistiques concernant la femme dans les Etats de l'Union Nord Américaine*. Journ. Soc. Statist., June, 1913. Pp. 4.

Ingenious comparisons of the cultural state of "feminist" and "anti-feminist" states, utilizing figures taken from the *Statistical Abstract*.

THOMPSON, W. J. *The census of Ireland, 1911*. Journ. Royal Statist. Soc., June, 1913. Pp. 27.

An interesting general analysis of the results of the census, by its director. Why there should have been a marked increase in the proportion that persons over seventy make of the total population is a statistical problem not completely solved in the paper or in the discussion which followed.

WILLIS, H. P. *The thirteenth census*. Journ. Pol. Econ., July, 1913. Pp. 15.

A candid account of the factors responsible for the partial failure of the census of 1910.

Coût de la vie et salaires. Bull. Stat. Gén., July, 1913. Pp. 22.

The returns of an inquiry into the prices of necessities and the wages of household servants made by the *Statistique générale* through the mayors of all towns in France with more than 10,000 inhabitants. The wage returns contain evidence of inaccuracy.

Mouvement économique général. Bull. Stat. Gén., July, 1913. Pp. 4.

Figures are given for various indices of economic activity, including employment, prices, foreign trade, discount rates, bank loans, clearings, and railroad earnings, for France, Great Britain, and Germany. Three-month averages for 1912 and 1913 are reduced to index numbers with the period 1901-1914 as base. With diagrams.

NOTES

PROGRAM OF ANNUAL MEETING. The twenty-sixth annual meeting of the American Economic Association will be held at Minneapolis, December 27-30. The executive committee meeting will be held on Saturday, December 27, at 9 A. M., followed by a business meeting of the association with reports of committees, etc. The first session of the association will be held on Saturday morning; the subject for discussion will be The Control of Public Service Corporations. The second meeting, Saturday evening, is a joint session with the American Sociological Society, at which addresses will be delivered by presidents Kinley and Small. The third session, on Monday, is devoted to the subject of Theory of Making Railway Rates. On Monday afternoon there will be round table meetings; at one of these Professor Carver will describe the Rural Organization Service, and at another Professor Taylor will lead a discussion on Theory of Rent in the Light of Present Conditions in American Agriculture. On Tuesday, at the fifth session, the subject of Syndicalism will be considered; and in the afternoon, at the sixth session, The Economic Effects of the Legal Trust Dissolution. It is expected that Professor J. H. Gray will present a paper on The Control of Public Service Corporations; Dr. B. H. Meyer, on The Theory of Rates; Mr. John Graham Brooks, on Syndicalism; and Professor W. E. Hotchkiss, on The Economic Effects of Legal Trust Dissolution.

THE NATIONAL TAX CONFERENCE. The Seventh National Conference on State and Local Taxation was held under the auspices of the National Tax Association at Buffalo, October 23-25. There were present 245 delegates representing 18 colleges and universities, 33 states, Canada, and Porto Rico.

For the most part, the discussions this year followed those of last year, the chief topics being centralization of administration, classification of property, and the taxation of corporations, forests, and mines.

Several departures were recommended by Professor Seligman in his presidential address: that henceforth the conference should not confine its attention to state and local taxation, but should consider federal taxes also, particularly those affecting state and local taxes; that not only taxes and revenues, but expenditures, also, should be considered; the extension of the association's publishing activities; and the creation of a central office. Steps have already been taken to put most or all of these recommendations into effect.

Few papers of the conference provoked more animated debate than that of Professor Joseph French Johnson on "Increment Taxes and the Partial Exemption of Buildings." For the most part, this was a discussion of the so-called Sullivan-Shortt bill which proposes a reduction of taxation upon New York city buildings by 10 per cent each year for five years, at the end of which time they will be taxed upon only half of their value. It has been advocated chiefly as a means of encouraging building and relieving congestion. Professor Johnson claimed that such a change would probably result in higher buildings and lower rents, but an increase of congestion; that it would not have the slightest effect upon speculation; and that the most important result would be the decline in all land values and hence a much higher tax rate upon the smaller base. He advocated a 1 per cent increment tax upon New York city land values as being of a different nature, easily estimated and rapidly increasing in productivity from year to year. Mr. C. H. Shields of Washington and Mr. A. C. Pleydell of New Jersey denied the validity and pertinency of some of Professor Johnson's points. Mr. Shortt of Canada deprecated the custom of citing the experiences of Vancouver and other cities of British Columbia as conclusive of how such taxation would work in the long run, or in older communities: these cities are still in the experimental stage and present conditions point toward a reversal in taxation policies as well as a great collapse in values.

It is interesting to note in this connection that Pennsylvania has just adopted the principles of the Sullivan-Shortt bill for second-class cities, that is, for Scranton and Pittsburgh. However, the total 50 per cent reduction on buildings is spread over a longer period and will not be reached until 1925.

The committee on the taxation of public service corporations, of which Professor C. J. Bullock was chairman, advocated classification of property for purposes of taxation and thus the securing of real rather than formal equality. Mr. A. S. Dudley of the Chicago, Milwaukee and St. Paul Railway argued that classification means heavier and unreasonable taxation of corporations and opposed the tendency toward removal of all constitutional limitations as to uniformity. Professor T. S. Adams expressed the belief that the best protection from inequitable taxation is not in constitutions, but in the public sense of fair play.

Professor Fred R. Fairchild presented the report of the joint committee (with committee of National Conservation Conference) on forest taxation, which recommended a low annual tax plus a yield tax upon

the timber harvested. Mr. C. M. Zander of the Arizona Tax Commission presented the report of the committee on the taxation of mines and mineral lands. This recommended the taxation of ore deposits and output in such a way as to encourage development and at the same time to require the owners to pay their just share of taxes instead of exempting or favoring such property, as has frequently been the practice in the past.

In other papers and in a round table discussion led by Mr. L. E. Birdzell of North Dakota reports were made concerning problems and progress in various states. Professor O. C. Lockhart discussed the failure of Ohio to get rid of the general property tax; Professor J. A. Fairlie gave a somewhat similar report for Illinois; and Mr. Carlton B. Pierce for New Jersey. Mr. Adelbert Moot of New York recommended retrenchment in expenditures as did Mr. E. E. Woodbury, who recommended also the repeal of the New York "secured-debts tax law." Chairman T. F. Byrnes of the New York commission advocated increased powers for the commission instead of only advisory ones in the supervision of local assessments. Judge R. J. LeBoeuf of Albany advocated a gross earnings tax only for New York corporations and an efficiency in the administration of state revenues and expenditures comparable to that used in ordinary business. Mr. D. M. Link of Indiana discussed the term, salary, and method of selecting assessors; and Professor C. L. Raper the frequency of assessments. Mr. W. W. Pollock, of the Manufacturers Appraisal Co., Cleveland, Ohio, advocated the employment of private appraisal companies to aid public assessors in the securing of expert assessments. Mr. J. F. Adams of Colorado discussed the sales method of equalizing assessments; and Mr. Thomas E. Lyons of Wisconsin the supervision of assessments and the important precedent called the Daniels decision, which upholds the right of a state commission to reassess a county improperly assessed, even though the state constitution guarantees the right of home rule. Mr. T. B. Paton, general counsel for the American Bankers Association, surveyed the taxation of banks in the United States; and Dr. R. H. Whitten, statistician of the New York Public Service Commission, presented a paper on the "Relation between Value for Tax and Rate Regulation Purposes" wherein he maintained that each and every value is valid only for the purpose for which it is made.

Hon. Joseph E. Davies, United States Commissioner of Corporations, reviewed the tax legislation of the current year. Substantially this consists in the centralization of administration in six states, notably in Ohio; the establishment of six permanent state tax commissions;

the reduction, in Pennsylvania, of the rate applicable to buildings in cities of the second class; the adoption by Michigan of the New York "secured debts tax law"; the adoption of inheritance tax laws in two states and the revision of such laws in seventeen other states. In addition, Minnesota has divided all property subject to taxation into six classes; New Jersey and Arizona have adopted systems of tax maps; Wisconsin has made a number of changes with respect to its income tax; Pennsylvania and Connecticut have revised their forest taxation; Massachusetts, New York, and Nebraska have provided for special tax commissions and a variety of constitutional amendments have been adopted or are pending in twenty different states. Many of these provide for the separation of sources of state and local revenue or the classification of property for purposes of taxation. One pending in Pennsylvania proposes to permit graduated or progressive taxes; one in Oregon proposes graded and progressive taxes on income, and others in Kansas and Nebraska propose similar taxes on income, franchises, and occupations.

Michigan has adopted the New York "secured debts tax law," the repeal of which is advocated by Judge Woodbury, formerly chairman of the New York commission; Pennsylvania and Connecticut forest tax laws are along the lines recommended by the committee of the National Association (Professor Fairchild, chairman of the committee, is on the Connecticut commission); Connecticut as well as Massachusetts has followed New York in the adoption of the "model" inheritance tax law originally drafted by a committee of the National Association; and legislation in numerous other states has been influenced by the same law.

Of very great interest is the persistent retention of the general property tax system by Ohio in spite of repeated efforts to get rid of it and, further, the extremely advanced step recently taken in the supervision of assessments in an effort to enforce this system. All local elective offices relating to assessments and review have been abolished and the entire machinery put under the control of the state commission and its appointees. This centralization in Ohio exceeds that of Indiana, Wisconsin, or any other state. However, the appointment of assessors was not put under civil service regulation.

At the business meeting of the association, Mr. A. E. Holcomb, treasurer, reported a present membership of 425, practically a doubling within the past year, and also a very marked improvement in the finances, there now being a handsome balance on hand to devote to the

proposed extension of activities. All the old officers were re-elected and only two changes were made in the executive committee.

The association recommended holding the 1915 meeting on the Pacific coast, possibly at San Francisco. At present Indianapolis and Denver are the most active contenders for the 1914 conference. The times and places of both meetings, however, are determined finally by the executive committee. On the whole the 1913 conference was among the most successful yet held and the past year has certainly been the most prosperous one for the association.

Cornell University.

ROY G. BLAKEY.

CANADIAN POLITICAL SCIENCE ASSOCIATION. The need has long been felt in Canada of some organization of national scope for the discussion and investigation of political and economic problems. At the Boston meeting of the American Economic and Political Science associations last Christmas, a group of the Canadians in attendance held a meeting and made arrangements to organize such a society. During the year a good membership was built up and in September the organization was effected at Ottawa. At this meeting a program of papers was presented. While taking the name of the Canadian Political Science Association, the new organization proposes to deal with economic and social as well as with political problems. In order not to conflict with the meeting of the American societies, to which many of the members belong, it was arranged to hold the annual meetings in September. The next one will be held in September, 1914, in Toronto.

Officers were elected as follows: president, Dr. Adam Shortt, Civil Service Commission, Ottawa; vice-presidents, Professor James Mavor of the University of Toronto, Hon. Sydney Fisher of Ottawa, Herbert B. Ames, M.P., of Montreal; secretary-treasurer, Professor O. D. Skelton, Queens University, Kingston. The executive committee is composed of the foregoing and also Dr. James Bonar, Ottawa; Hector McInnes, K.C., Halifax; C. Hill-Tout, Vancouver, B.C.; President W. C. Murray, Saskatoon; G. Y. Chown, Kingston; Professor Stephen Leacock, McGill University; Professor G. I. H. Lloyd, University of Toronto; A. H. F. Lefroy, K.C., Toronto; Professor Montpetit, University of Laval, Montreal; John A. Cooper, Toronto.

It is announced that the proceedings of the 1913 meeting will shortly be published. Among the papers presented are to be noted: "The housing of our immigrant workers," by Bryce M. Stewart; "Agricultural credit in the West," by J. A. Stevenson; "The role of the middleman," by R. H. Coats; "Canada's balance of trade," by Dr.

James Bonar; and "The working of the Lloyd-George insurance act," by E. F. Newcombe, Jr.

The American Statistical Association is planning to celebrate its 75th anniversary with special observance in February, 1914. The anniversary meeting will be held in Boston. A more lasting memorial is planned in the publication of a book dealing with the development and progress of statistics in various countries of the world, to be prepared by leading statisticians. It is announced that representatives of 16 countries have already promised their coöperation.

The Third Conference of the National Housing Association will be held in Cincinnati, probably December 3, 4 and 5, 1913.

The National Association of Corporation Schools, which was organized a year ago, held its first annual convention at Dayton, Ohio, September 16-19. Professor Galloway, of the New York University School of Commerce, Accounts and Finance, was re-elected secretary of the association, and is preparing plans for the next convention, which will be held in the East.

HARVARD BUREAU OF BUSINESS RESEARCH. The Graduate School of Business Administration of Harvard University in 1911 increased its organization by establishing the Bureau of Business Research. In May, 1913, after two years of work in field and office, this bureau issued its first bulletin entitled *Object and History of the Bureau in Brief, with Some Preliminary Figures on the Retailing of Shoes*. A second edition is now ready.

The establishment of the Bureau of Business Research is but another symptom of the research spirit of the times. Many economists, particularly those of the younger generation, have for some time felt that more inductive study of actual economic processes and more specific knowledge of them should be gained before any further important constructive work in economic theory be attempted. If, then, the definition of business as applied economics should be accepted, the founding of the Bureau of Business Research might be held to have a close relation to this feeling among economists.¹

More specifically, however, the bureau was established to gather, classify, and describe facts about business.² It is believed that a university has, for gathering these facts, an inherently strategic posi-

¹ It is, doubtless, hardly necessary to say that at this stage the bureau is troubling itself very little about economic theory, although on pages 10, 11, and 13 of its bulletin some facts related to the theory of rent are mentioned.

² The first six pages of the first bulletin go more at length into the object and history of the bureau.

tion pertaining to a disinterested, non-competing, and trusted third party. But the main object of the bureau is to get precise and reliable information about business for the Graduate School of Business Administration. An important but incidental work is to furnish this information in usable form for the business world and for other institutions of training for business.

Business comprehends the great divisions of production, market distribution, and administration. Market distribution was selected as being the field of business most pressing for attention; shoes was selected as the commodity for study. Shoes is a commodity not so complex as some, and yet it is a staple, distributed in every main way—through wholesaler and retailer, through dealer only, direct to the user, through the manufacturer's own store, and by mail. For its retailing there are all the main types of retailer—the retailer with but one store selling one commodity, footwear only; the department store in the city; the general store in the country; the chain store, manufacturer's and non-manufacturer's, local and interstate, with a varying number of store-units handling footwear only.

The first concrete task was to find out and assemble the operating costs of a large number of shoe stores and shoe departments. In the summer of 1911, field agents visited shoe retailers in Ohio and Wisconsin, as typical American areas, and soon learned that practically no two retailers kept their accounts in the same way. Some, for example, reckoned profits on the cost and some on the selling price. Some charged salary for their own time and rent for their own stores, while others did not. Some meant one thing by selling expense and some meant another. Figures that could be adjusted and made serviceable were secured, but the need of a common basis of comparison, a common measure, was clearly seen. The standard example of the uniform system of accounts for railroads was, of course, before the bureau. But this was imposed from above by authority; its adoption did not rest upon voluntary coöperation. More recently the United Typothetae of America has succeeded in enlisting a large proportion of the printers of the country to adopt a uniform set of accounts³ permitting accurate cost comparisons. Early in 1912 the bureau gave to the trade a uniform accounting system for shoe retailers. It has been received kindly by various trade associations both national and local, by trade papers, and by the shoe retailer individually.

In the summer and fall of 1912 more agents of the bureau were out

³Standard Uniform Cost Finding System, devised by American Printers Cost Commission.

in the East, on the Pacific coast, and in the central West, explaining and introducing the system, and securing figures direct from the books of shoe dealers. In May, 1913, there were full and reliable data on a uniform basis of accounting collected from 130 shoe stores representing nearly every section of the country but especially eight large cities—New York, Philadelphia, Baltimore, Pittsburgh, Cleveland, Detroit, Chicago, and Cincinnati. On this data was based the first bulletin, which discussed specifically; gross profit, total operating expense, the various expenses of buying, sales force, advertising, deliveries, rent, interest, and the topics of stock-turns and annual sales of the average salesperson. Range figures were given, lowest and highest, and central figures (not averages); and, finally, figures about which there was a concentration sufficient to indicate a realizable standard.

In the summer of 1913, more extensive field work than ever was carried on. Field agents visited shoe retailers in the states of Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Ohio, Indiana, Michigan, Illinois, Wisconsin, Iowa, Missouri, and California. In September, the number of retail shoe stores adopting the bureau's uniform accounting system or coöperating to the degree of furnishing specific figures from their own businesses was over 600. With this much broader basis of data it will be possible to make narrower cost classifications than before; for example, according to the population of the community where the concern is located, the volume of business done, and the grade of business done. Thus will the analyzed costs of retailing, actual and possible, be obtained, while the costs of distributing by wholesalers and by manufacturers selling direct, will also be secured—this last a much less tedious and expensive task.

The bureau has also been making a further reconnaissance of the field of distribution and has selected certain other commodities for investigation—ready-to-wear clothing, groceries, books, and hardware, to be taken up in the order named, about one year apart. The possibility of work for the bureau is vast. The side of distribution between the producer of raw material and the manufacturer has not been touched at all, and besides distribution there are the great fields of production and administration.

In conducting the work of the bureau, the field agent is absolutely essential. Although an extensive mail propaganda has been carried on, statistics prepared after two years' and one month's work showed that over four fifths of the adopters and data had been secured by agents, as opposed to mail; and the quality of their information is so far superior that the mail information is used for corroborative purposes

only. So far, these agents have been chosen from the school's staff and from second-year students. These are graduate students with training in economics, accounting, and business organization. The plan affords an opportunity to students of the school to gain experience during the summer months. As the students for this work are carefully selected, because of the quality of their own work and other considerations, it has already become a mark of distinction, and a corresponding stimulus to be chosen as a field agent of the bureau. Even if it becomes necessary to establish a permanent nucleus of more mature field agents, there will always be an opportunity for supplementary work by these selected student agents. Such appointments might be somewhat fancifully called business interne-ships.

The Bureau of Business Research has received much appreciated aid in the form of suggestions and constructive criticism from many sources. It welcomes communications or coöperation of any nature from any reader interested in its work.

Harvard University.

SELDEN O. MARTIN.

The New York School of Philanthropy, under the directorship of Edward T. Devine, began the year in enlarged quarters on the top floor of the United Charities Building. In his annual report for the year 1912-13, the director calls attention to the addition of Porter R. Lee, Henry W. Thurston, Kate Holladay Claghorn, and George E. Johnson to the permanent staff, giving their entire time to the work of the school; the requirement of two full academic years of resident study for the diploma; and the closer alliance with the work of various philanthropic agencies of the city and municipal departments.

The Interstate Commerce Commission has selected a permanent advisory board on the valuation of railroads, under the act recently passed by Congress, to assist the director. Dr. Edward W. Bemis has been appointed a member of this advisory commission, together with Hon. J. S. Williams, Assistant Secretary of the Treasury, and C. F. Staples, of the Minnesota Railroad and Warehouse Commission.

Mr. J. M. Atkinson, chairman of the Missouri Public Service Commission, has recommended to the curators of the University of Missouri, the establishment of a chair for instruction on the subject of physical valuation and appraisalment of public utilities. It is advised that such a course be opened in connection with the economic and engineering department for the instruction of students who would be eligible for employment by the commission.

The Bureau of the Census has decided to undertake a new investigation relating to wealth, debt, and taxation. This will continue the inquiry begun in 1902, a report of which was printed in 1907. Dr. John Lee Coulter has been appointed representative of the Bureau of the Census to take charge of this investigation.

The name of the Bureau of Labor of the federal Department of Labor has been changed to "The Bureau of Labor Statistics."

The United States Commission appointed by President Wilson to make a special investigation of rural credit in European countries has intrusted the drafting of the report to a committee of which Dr. John Lee Coulter is chairman. It is expected that the report will be presented during the coming session of Congress.

The American Commission, organized under the direction of the Southern Commercial Congress for study of rural credit, will also submit a report. This will be available as a public document early in December.

The Cambridge Housing Association, of which Professor James Ford of Harvard University is president, has made its first report, *Housing Conditions in Cambridge* (Arthur C. Comey, secretary, Harvard Square, Cambridge, Mass., pp. 81). A special investigation covered 397 houses in 7 sections of the city. Statistical tables show the number of families per house, construction and state of repairs of houses, lighting of rooms, and conditions of toilets and cellars.

The Massachusetts Commission of Immigration is to report in January its findings and recommendations as to the conditions of the foreign population of the state. The chief matters under consideration are the protection, education, and distribution of immigrants. The commission has a number of investigators in the field and is holding public hearings at various typical industrial centers. Miss Grace Abbott, secretary of the Immigrant Protection League of Chicago, is executive secretary of the commission (Room 440, State House, Boston).

At the last session of the legislature of New York a commission to revise the banking law was created; 14 members constitute this commission. Mr. A. Barton Hepburn is chairman, and on the membership is to be noted Professor Joseph F. Johnson, of New York University. The commission will hold public hearings, to which will be invited bankers, economists, and others interested in the revision of the banking law.

The Industrial Development Bureau of the Merchants Association of New York is engaged in making an industrial survey of New York city, under the direction of Dr. Edward E. Pratt, formerly of the New York School of Philanthropy. The inquiry has for its object, first, to find out the disadvantages which local manufacturers labor under, with the idea of eliminating them, and, second, to discover the fundamental economic advantages of New York city for different lines of industry, for the purpose of bringing new factories and industries into the New York territory.

The Department of Labor Statistics, Board of Trade, London, announces the appointment of F. H. McLeod as director.

By a decree of May 13, 1913, the French government has constituted a special commission of 24 members, to investigate the factors affecting the health and efficiency of the laboring population and the various problems connected with its vocational distribution. The Minister of Labor (M. Henry Chéron) is president of the commission and its whole personnel is of unusual distinction. Two sub-commissions have been formed, one of which is to concern itself with physiological problems, while the other will direct various statistical inquiries which will be undertaken by the Ministry of Labor.

Housing conditions and rents continue to be the subjects of frequent investigations by European statistical bureaus. The results of recent inquiries will be found in: "Bulletin de la Statistique Générale de la France," July, 1913, p. 390; "Beiträge zur Statistik der Stadt Mannheim," 1912, Nos. 27, 29; "Der Wohnungsmarkt in München," München, 1913; "Der Wohnungsmarkt in Strassburg, Beiträge zur Statistik der Stadt Strassburg," 1913; "Die Mietpreise in der Stadt Zürich in den Jahren 1907 bis 1911," Zürich, 1913.

Mr. A. N. Kiaer, who has had such an honorable career as director of the Statistical Bureau of Norway since 1867, has recently resigned. His successor is Mr. Rygg, professor of political economy and statistics at the University of Christiania.

During the past year the libraries of the New York Charity Organization Society, the Association for Improving the Condition of the Poor, the New York School of Philanthropy, and the Russell Sage Foundation, have been merged into one, to be known as the Russell Sage Foundation Library. This is now housed in a new building at Lexington Avenue and 27th Street. The library contains about 10,000 bound volumes and 15,000 pamphlets; 250 periodicals are received, and articles of value are clipped, " " , and indexed.

A. C. McClurg & Co., of Chicago, announce the publication of "The National Social Science Series," edited by President McVey, of the University of North Dakota. Among the volumes for early publication are *The Family*, by Professor J. M. Gillette; *Money*, by Professor William A. Scott; *Taxation*, by C. B. Fillebrown; *Competition*, by J. F. Crowell; and *Political Economy*, by President McVey. The purpose of this series is to "furnish for busy men and women a brief but essentially sane and sound discussion of present-day questions." The price of each volume will be 50 cents.

A new edition of the *Immigration Problem*, by J. W. Jenks and W. J. Lauck, is announced.

Sir Isaac Pitman & Sons announce a new serial publication, Pitman's *Commercial Self-Educator*, in 16 seven-penny fortnightly parts, illustrated. Mr. Robert W. Holland, author of business legal books, and lecturer on commercial subjects, is the editor.

The New York Public Library has at its disposal a number of copies of a volume issued by the National Association of Customs Brokers, copyrighted in 1909, and entitled *Customs Tariff Act of August 5, 1909, with Alphabetical Schedule and Administrative Provisions, Superseding the Customs Administrative Act of 1880 etc.* The volume contains also the text of the Cuban reciprocity treaty; sealing act of December 29, 1897; pure food act of March 3, 1903, and list of parcel-post countries; and is especially valuable for its elaborate index of the Payne-Aldrich act, and full references to all Treasury decisions. Libraries desiring a copy may obtain it by applying to the Reference Librarian, New York Public Library, New York, and enclosing eight cents to cover postage.

The federal Department of Agriculture has begun the publication of a new "Journal of Agricultural Research." The first number was issued in October. It is designed to give early notice of the economic value of progress in scientific research applied to agricultural problems. For the first few issues the publication will be largely confined to papers from the Department of Agriculture only. Later numbers will probably include articles prepared by investigators in state colleges and experiment stations. The publication is technical in character and will not be circulated except among scientific specialists.

The Department of Agriculture has discontinued the publication of the "Monthly Crop Reporter." Crop statistics will be furnished for the press as heretofore, and there will be issued a "weekly news letter" in typewritten form.

The "Washington University Studies" is a new quarterly publication. Each alternate number is to be devoted to studies in philology, philosophy, psychology, history, economics, and sociology, while the remaining numbers are devoted to the natural sciences and to technology. The second number (St. Louis, Oct., 1913) is edited by Professor A. A. Young, and contains, beside historical and literary papers, articles by Dr. G. B. Mangold and Dr. C. E. Persons summarizing the results of recent investigations undertaken by the School of Social Economy of Washington University. These studies relate to "Industrial opportunities of children in St. Louis," and "Neglected children."

Mr. and Mrs. Sidney Webb, during October and November, gave six lectures in London on the general title "Socialism Re-stated." These will shortly be published.

Gustav Fock, Schlossgasse 7-9, Leipzig, has issued *Catalogue No. 433*, giving a list of books on political economy, taken from the libraries of P. Hirsch of Berlin, K. P. Hermes of Charlottenburg, and R. Seigfried, professor at the University of Königsberg. Over 4700 items are listed.

The School of Commerce, Accounts and Finance of New York University announces the publication of a new magazine "Business Education." The sub-title is "A Self-Filing Magazine of Business Information." Every article is indexed for the purpose of filing and giving the reader a more correct idea of its contents than the title might indicate. The magazine is to be so arranged that no two articles will be on the same page, thus permitting the filing of each article without destroying any other. Dean Joseph French Johnson is consulting editor; Charles W. Gerstenberg, secretary of the School of Commerce, Accounts and Finance, is managing editor; and Mr. Richard P. Ettinger is business manager.

In "The Nation" for September 4 reference is made to the publication of a new monthly magazine, edited by Dr. Giovanni Preziosi, entitled "La Vita Italiana all' Estero." This consists of 80 pages a number, and contains articles concerning the condition of the Italians in the United States. It is published at Via Due Macelli, 9, Rome; annual subscription is 12 lire.

"Die Geisteswissenschaften" is a new weekly publication of which the first number appeared on October 1 (Leipzig, Veit & Comp.). Edited by Dr. Otto Buek and Professor Paul Herre, its purpose is to furnish a clearing center for the various special interests within the

general field of the humanities, much as *Science* serves the natural sciences in this country. Its plan provides for contributions of general interest by specialists, for papers and discussions relating to the status of universities and other institutions of learning and to methods of instruction and research, for reports on the progress of research in special fields, and for reviews, accounts of the meetings of learned societies, personal notes, and current bibliography. The first number sets a very high standard, counting several well-known leaders of German thought among its contributors. Of special interest to economists are papers by Professor Rudolph Eucken on "*Zur Einigung der Geisteswissenschaften*" and by Professor Paul Mombert on "*Die neue Entwicklung der Bevölkerungslehre in Deutschland*."

Appointments and Resignations

Professor Edward M. Arnos has returned to Olivet College, after a year's absence spent at the University of Chicago.

Dr. Gilbert G. Benjamin has been appointed assistant professor of sociology in the University of Pittsburgh.

Mr. Lee Bidgood, lately of the University of Wisconsin, has been appointed professor of economics in the University of Alabama.

Mr. A. L. Burt has recently been appointed lecturer in history and economics at the University of Alberta, Edmonton, Alberta.

Professor Frank T. Carlton, of Albion College, is giving a course in labor problems at the University of Michigan during the first semester of the current college year.

Professor John R. Commons has resigned from the Wisconsin Industrial Commission. He returns to his work in the University of Wisconsin.

Professor William J. Cunningham, of Harvard University, has been appointed president's assistant of the New York, New Haven & Hartford Railroad, with headquarters at New Haven. He has been granted partial leave of absence, and will lecture at Harvard one day per week.

Mr. Frederick A. Dewey has been appointed lecturer on economics and sociology at Bryn Mawr College.

Dr. A. S. Dewing, formerly of Harvard University, is instructor at Yale University, conducting courses in corporate finance.

Professor John C. Duncan, lately of the University of Illinois, has been appointed professor of administration and accountancy in the University of Cincinnati College of Commerce.

Professor Richard T. Ely has returned from Europe and resumed work in the University of Wisconsin. While abroad he gave a series of lectures at the University of London, and continued on the continent the study of the land problem, in which he has for some time been engaged.

Dr. J. A. Estey, of Dalhousie University, Nova Scotia, has been appointed instructor in economics in the University of Wisconsin.

Professor W. C. Fisher has been appointed lecturer at Harvard University, and is to conduct a course during the second half-year on socialism and the modern labor movement in Europe.

Professor Lee Galloway, of the New York University School of Commerce, Accounts and Finance, has been elected vice-president of the American Fair Trade League, which is interested in exposing methods of unfair competition and fraudulent advertising. Professor Galloway is gathering statistics for the league relative to marketing methods in the wholesale and retail business.

Mr. Gerhard A. Gesell, recently at the University of Kansas, has been appointed assistant professor of economics at the New York University School of Commerce.

Professor Stephen A. Gilman, of the University of Wisconsin, conducted a party of students during the past summer in visiting important business establishments in Germany and neighboring states.

Dr. L. C. Gray, lately of the University of Wisconsin, has been appointed associate professor of economics in the University of Saskatchewan. He is planning to spend the next three years largely in a study of the special economic problems confronting the farmers of Saskatchewan, and for this purpose a liberal research fund has been placed at his disposal.

Mr. P. W. Green has resigned his position in the economics department of Washington State College.

President Arthur T. Hadley has been elected a director of the New York, New Haven & Hartford Railroad.

Professor M. B. Hammond, of the Ohio State University, was appointed in July a member of the Industrial Commission of Ohio. He will retain his connection with the department of economics at the university. A law authorizing this new commission is patterned after that of Wisconsin. It creates a commission of three, each appointed for a term of six years, at a salary of \$5000.

Mr. G. W. W. Hanger has recently been appointed a member of the new Board of Mediation and Conciliation. Mr. Ethelbert Stewart, of Illinois, has been appointed chief clerk of the Bureau of Labor Statistics of Washington, to succeed Mr. Hanger.

Professor C. C. Huntington, of the Ohio State University, has been promoted to a full professorship of economics and sociology.

Dr. G. N. Janes has been made instructor in economics and political science at the University of Washington, Seattle.

Professor Emory R. Johnson has been appointed a member of the Public Service Commission of Pennsylvania. His term runs for seven years.

Dr. J. B. Kennedy, lately instructor of economics in Union College, Schenectady, has accepted the position of professor of economics and history at the Presbyterian College of North Carolina.

Mr. Alvin H. Kessler has been appointed instructor in journalism in the School of Economics, University of Pittsburgh.

Mr. William H. Kiekhoefer has been promoted to an instructorship in economics in the University of Wisconsin.

Mr. J. Gordon McKay has been appointed assistant in economics in the University of Wisconsin.

Mrs. Theresa McMahan, of the University of Washington, has been appointed on the Minimum Wage Commission created by the last legislature.

Dr. James D. Magee, formerly of Western Reserve University, has been appointed instructor in economics in the University of Cincinnati.

Professor Royal Meeker has resigned his position in the department of economics in Princeton University, and assumed charge of the federal Bureau of Labor Statistics at Washington.

Mr. A. A. Osborn has been appointed instructor in commerce and industry in the School of Economics, University of Pittsburgh.

Dr. Edward E. Pratt during the past summer directed the courses of economics in Europe for New York University. Thirty-five students were members of these courses, divided into three groups: (1) European commerce and industry; (2) labor problems and industrial betterment; (3) social problems. The countries visited included England, Scotland, Denmark, Norway, Sweden, Holland, Belgium, France, and Switzerland. For this work the students receive university credit leading to higher degrees.

Mr. Charles H. Preston, of the New York University School of Commerce, has been appointed to an assistant professorship of business administration.

Professor C. L. Raper, of the University of North Carolina, has been appointed correspondent of the federal Rural Organization Service for the district covering the states of North Carolina, South Carolina, Virginia and Maryland. During the past summer Professor Raper served as an expert for the Constitutional Amendments Commission of North Carolina.

Dr. W. E. Rappard has resigned his position as assistant professor in Harvard University, having accepted a professorship of economic history at Geneva University.

Mr. Stockton Raymond has resigned his position in the department of economics and sociology at the Ohio State University to engage in practical philanthropic work.

Miss Emilie Renz has been appointed instructor in economics and sociology at the Ohio State University.

Professor E. A. Ross, of the University of Wisconsin, is on leave of absence for the first semester of the current year to investigate sociological conditions in South America.

Mr. Clare L. Rotzel, of the New York University School of Commerce, has been promoted to an associate professorship of accounting.

Miss Beatrice H. Sheets has been promoted as assistant professor in the Ohio State University.

Mr. Herbert D. Simpson, of Mt. Union College, Alliance, Ohio, has been appointed instructor in economics in the University of Wisconsin.

Professor A. W. Taylor, of Washington State College, has been appointed by the federal Rural Organization Service as collaborator for the Northwest.

Professor Carl W. Thompson has resigned his position at the University of Minnesota and accepted a position with the Rural Organization Service at Washington.

Mr. J. A. Todd, formerly on the staff of McGill University, has been appointed professor of economics in Dalhousie University.

Dr. Frank D. Tyson, lately of the New York School of Philanthropy, has been appointed instructor in sociology in the University of Pittsburgh.

Mr. V. N. Valgren has been appointed to an assistant professorship of economics in the University of Kansas.

Professor Albert W. Whitney, lately of the University of California, has been appointed associate actuary of the New York State Insurance Department. In 1905 Professor Whitney was employed by the Board of Fire Underwriters of the Pacific to prepare and report on the rates to be charged for policies containing the co-insurance clause. In 1906 he was employed by the Chamber of Commerce of San Francisco to investigate and report on the settlement made by fire insurance companies of the losses arising through the conflagration of that year. In 1910 he was retained as actuary to the joint committee of the legislature of New York, authorizing an investigation of the affairs of insurance companies other than those doing a life insurance business. As a member of the Actuarial Society of America, Professor Whitney has made various contributions.

Dr. N. R. Whitney has been appointed instructor in political economy at Johns Hopkins University.

During the past summer Professor Philip B. Kennedy, instructor in trade and transportation in New York University, and Mr. William J. Barney, made an investigation in Europe in regard to the economic, commercial and industrial aspects of free ports. This inquiry was made under the auspices of the Committee of Foreign Trade of the Merchants' Association.

Professor Robert Coit Chapin, of Beloit College, died September 12, at the age of fifty. He was the author of *The Standard of Living Among Workingmen's Families in New York City*, an investigation based on studies as secretary of a committee working under the auspices of the Russell Sage Foundation.

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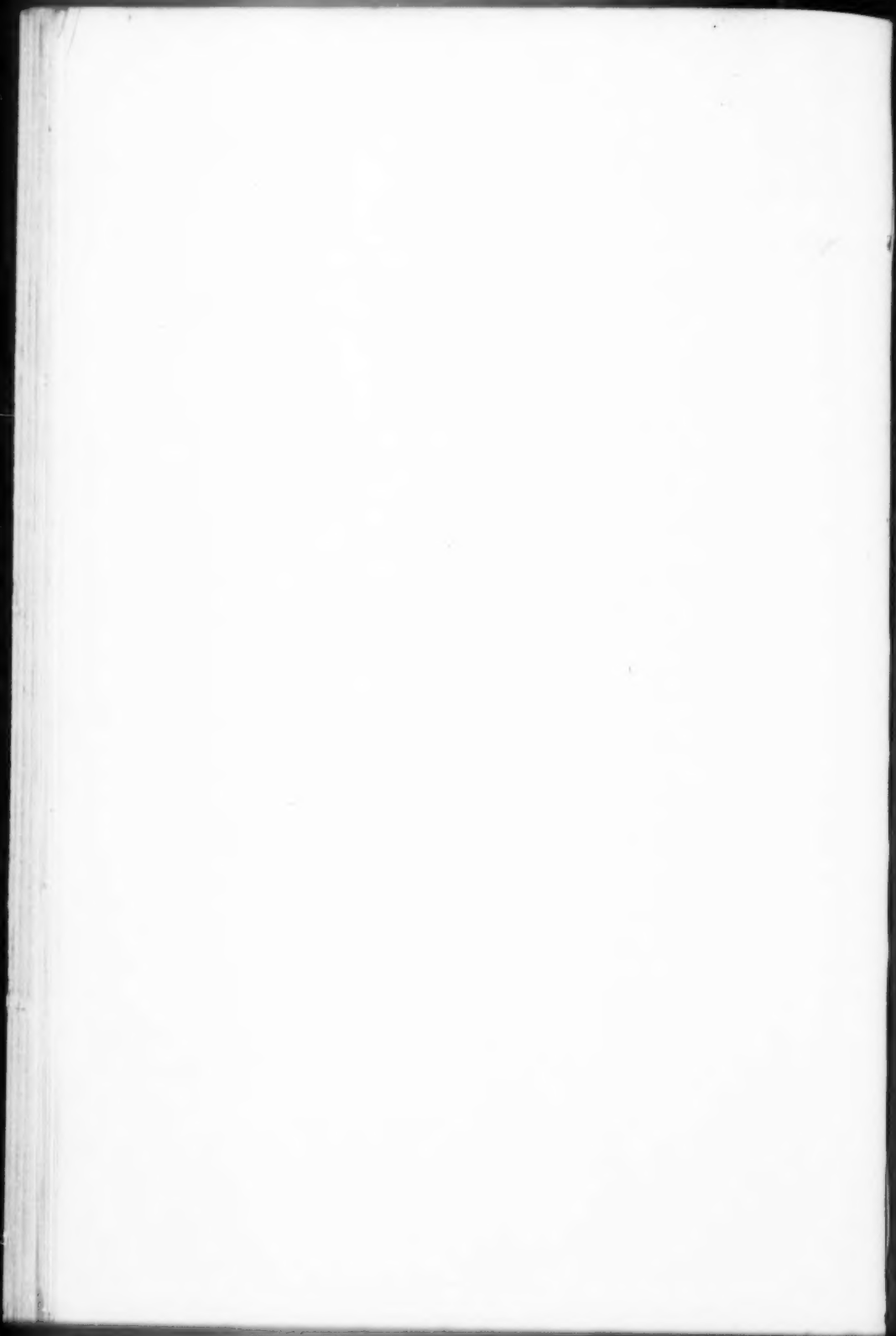
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The American Economic Review

VOLUME III, NO. 4

DECEMBER, 1913

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